City Considers West St. Closing

The Worcester City Council, at its January 30 meeting, ferred WPI's petition to close a section of West Street to Council's committee on traffic.

This action moves the petition one step further toward

Council's ultimate decision.

The petition was originally filed with the Council tober 31, 1972. Following normal procedure, the Council ferred the petition to the Planning Board for a recomendation. The Board held a hearing at which WPI ofials presented the case for closure. However, the Board ferred their recommendation until last year's Institute ad construction was completed. This work was cometed in December and the Board at its January 9 meeting ted to recommend to the Council a temporary closing of est Street for 90 days. During the trial period, they commended that the city traffic department be quested to make traffic counts in the vicinity of the mpus to determine the effects of driving patterns caused the closure.

The next step for the petition is the Council's Traffic mmittee meeting this month. The committee will make recommendation to the full Council which will then act the petition. If these steps result in favorable action for PI, West Street from Salisbury Street to Institute Road ould be closed to through traffic for three months, robably this Spring.

Permanent closure of the street, which WPI seeks, will the subject of further hearings and discussion after the rial period, or toward the end of it. Reactions of the public the changed traffic patterns will be important factors in

he final decision.



Will West St. ever look like this?

Newspeak Contributors:

All Stories due Saturdays 12 noon



NEWSPEAK

Tuesday, Feb 5, 1974

West Street Story

ireen Campus: A Few Extra Steps by Each, a Big

If the Worcester City Council accepts the January 9 ecommendation of the Planning Board to close West street for a trial period, it will be the second big step m making WPI a pedestrian campus. The first was noving the Buildings and Grounds Department and its trucks out of the heart of the academic building area, a by product of the conversion of the former B & garage into the Project Center.

The last two steps: the permanent closing of West St. and the transformation of Boynton Hill into a edestrian mall with lawns, shrubs and trees and

Creating a pedestrian campus has long been nuggested by WPI people, proposed by planning consultants and incorporated into the Plan to Restore he Balance by the Board of Trustees. It is an im-

portant part of the College's future.
Our students, the very reason of our existence, are mostly pedestrians: 880 live on campus; 650 in valking distance. Going pedestrian means adapting of the life style of most of our students.

It also means adapting to the esthetic needs of all aculty, staff and students. The time to rid America of gliness has come, not just for cities but campuses ugliness has come, not just for cities but campuses too. Many colleges and universities today are turning pedestrian to ruise their quality of life, to get more out of learning and living. For a college of engineering that has set liself the goal of educating technologists who have a sense of values and of social responsibility, this move is a must, in short, the pedestrian campus will benefit everyone in the WPI community. The trial closing will give us a golden opportunity to take this big step towards a better environment.

Because the City Council's decision on the permanent closing will hinge largely on its judgement on how the temporary one went, we must do everything we can to make this trial period a success.

ve can to make this trial period a success.

We have presented our case before City authorities with ligures, facts, and fervor; we have pointed out hat closing West Street will not be a major inonvenience because the drivers who now use it as a brough street or an alternate route between

Salisbury Street and Park Avenue, are relatively few and will quickly adjust to the new pattern. We expect this to be proved accurate just as it was in the many months Institute Road was closed by road work. Our principal position, however, is that the loss of a small section of one street to public use will be immeasurably outweighed by the gain of a more attractive and livable campus will bring to the College as an institution of learning that serves the public.

Obviously, the temporary closing will not allow us to complete the landscaping and walkway con-

struction needed for the permanent greening o Boynton Hill. But an effort will be made by the Campus Environment Committee to provide alter nate parking spaces equal in number to what we have now. The CEC has studied the situation and made recommendations. The President's Advisory Council has looked them over and added its own. The CEC will hold further meetings and one and all are invited to come and speak up.

Relocation of parking spaces will be carried out it steps during the trial closing. In reassigning spaces emphasis will be put on making sure daily commuters can park as closely to their places of work and study as possible and to keep to a minimum the number of those who will have to walk up Boynton Hill from the east side lot.

Inevitably these rearrangements will lengthen the car-to-door walking distances for all concerned. But it may be helpful to ask to what degree we have taken it may be helpful to ask to what degree we have taken our present parking patterns for granted. The vast majority of people working in government, industry and education do not have parking anywhere near as convenient as WP lors have had so far — or even as they will have in the future. A visitor was heard saying: "You people park closer to your desks than I park to my living room at home."

The use of these key areas around the Boynton Hill buildings for automobiles has spouled us. If that were the only result, however, it wouldn't be so bad a little exercise, a little less oxygen, so what?

exercise, a little less oxygen, so what

Unfortunately, this tradition has spoiled our whole

Our old buildings aren't at all as unattractive at they appear — by themselves. They look ugl because they stand in wall-to-wall asphalt covered by wall-to-wall automobiles. They look like a 19th Century rolling mill inside a 20th Century parking lot. To newcomers — including visiting students and

their parents — who are too tactful to say it but not too blind to see it. Boynton Hill's appearance epitomizes what technology's sometimes ignorant critics have accused technologists of for so long — a lack of esthetic sense and taste, a lack of culture and a tendency for nothing more than physical efficiency.

This criticism is made in spite of the lovely grounds WPI still possesses, in fact it probably is made because of them: we look worse because of the shocking clash between rolling hill and rolling nill. But WPI can be attractive. So let us prove in this respect, too, that what we say about educating technological humanists is not a slegan to boost endowed the say that the local boost endowed the say that th

downers and enrollment but an honest goal: t educate the builders of a better — and better lookin — world of tomorrow.

Blood Drive Next Week

The annual Red Cross Blood Drive will be held this ear in Alden Memorial Hall on Monday, Tuesday, Wednesday and Thursday, February 11 - 14. Although is is a fraternity-sponsored event, for the most part, are urged to participate and give this gift of life. It eems pathetic that last year only about 20 percent of te total student and faculty-administration body build bring themselves to give up at most one hour of ime and a pint of blood for the benefit not only of thers but also the donors themselves, yet this was an crease over the 15 percent of previous years. To elp get a better response, the drive this year will be tended to four days, including Tuesday night.

It can easily be seen that with blood shortages curing during various times in many places around he world, your blood can be a help to others. But did ou know that if you give blood, any member of your amily may receive any amount of blood free from he Red Cross, whereas otherwise you would have to May for each pint of blood? Members of the WPI community have been able to take advantage of this benefit many times, drawing from the bank of blood from those donating to WPI. If you say you must attend strenuous gym classes or the like, think up another excuse, because you will be excused from gym. (And if you don't want to go to gym for some reason, all you have to do is give blood!)

As happened last year, there will be contests in our Blood Drive this year. SAE, who retired the former Blood Drive trophy, again issues the offer of 1/2 keg of beer to the house having the greatest percentage of the brothers giving blood; to the house having the largest percentage will go a new trophy. Student Activities is offering beer to the dormitory floor having the highest percentage donating blood.

So what do you say we abandon the apathy which seems to pervade our society and help others as well as ourselves. If you need more incentive than selfsatisfaction, that's also available. We can join together and reach our goal of 700 pints this year!!!

Give 'Em Hell, Dick

"This Administration has proved that it is utterly incapable of cleaning out the corruption which has completely eroded it and reestablishing the confidence and faith of the people in the morality and honesty of their government employees. The investigations which have been conducted to date...have only scratched the surface. For every case which is exposed, there are ten which are successfully covered up and even then this Administration will go down in history as the 'scandal-aday Administration.'

"It is typical of the moral standards of the Administration that when they are caught redhanded with pay-off money in their bank accounts the best defense they can give is that they won the money in a poker game, a crap game, or by hitting the daily

"A new class of royalty has been created in the United States and its princes of privileges and pay-offs include the racketeers who get concessions on their income tax cases, the insiders who get favorite treatment on government contracts, the influence peddlers with keys to the White House, the government employee who uses his position to feather his nest. The great tragedy, however, is not that corruption exists but that it is defended and condoned by the President and other high Administration officials. We have had corruption defended by those in high places. If they won't recognize or admit that corruption exists, how can we expect them to clean it up?"

Nov. 13, 1951-Sen. Richard Nixon In His Denunciation of the Truman Administration At The Hotel Statler, Boston.

From The Editors:

EDITORIAL

A high priority in the philosophy of any newspaper is the striving for improvement. As we begin our term on the hot seat, we feel that this publication is a fairly accurate reflection of the WPI community. Not that the opinions expressed in these pages are representative of all individuals in the community. but they do express the mood of the campus.

Although we intend to make campus news the focal point of the paper, we recognize the need to include outside news of interest to WPI. As we try to expand our coverage to news on other campuses and in the Worcester community, we must again emphasize our need for staff reporters. If we are to cover the news responsibly, it is essential to have the personnel to do the job.

Along this same line, we have chosen to reorganize our editorial structure. The Editorial Board (to be decided within the next week) will consist of those editors who

may sign editorials. The addition of the Managing Editor will allow for better coordination of the paper's content.

A new policy we wish to adopt in writing editorials is to inject constructive criticism. We feel that this can be a major contribution to you, the readers. In return, we would like those who send letters to the editors to use the same policy constructive criticism. Everyone seems proficient at letting off steam, but what our campus needs is positive contributions. We strongly encourage response from the WPI community. We will uphold the past policy of withholding names upon request, but all the letters must be

We admit that we will not hesitate to make changes in an effort to improve. With the support and respect of the community, this year will be a great success for us and everyone. Best wishes for the New Year!

Letters:

Food Service Criticized

To the Editor:

Well, it's been about half a year now since daka servomation has treated our campus to their culinary talents. The set-up in the dining room has changed - a paint job, the screen in front of the "slop line", new drapes. Some of the recipes and menus have changed we haven't had just plates of brown beans for lunch for quite some time. The cake has been coming in smaller pieces, but a lot of people feel the food has improved. They've been very generous with their old trays and even put instructions on the hot chocolate machine and put Sweet 'n Lo out for those that want to justify that second ice cream.

Still the food hasn't changed all that radically since last year. It still makes going to Mac Donald's seem like a treat. It would be nice if the veal patties acquired some veal and the hamburger lost some of its fat and grissle, but they are working on a budget. Duke seems to have a fantastic talent of making stew type concoctions over noodles and what not look like someone flushed twice (it is a long way to the kitchen.) Every now and then they let someone loose back there with a salt deficiency that I just don't believe. Once they got the clam chowder hot enough to have to blow on it - guess who made it (maybe they forgot to wash the clams?)? The pot roast the other night looked really good. Too bad it was too cold to eat. The special dinners are nice that way. If the

Jon Anderson,

John Hatch,

Kilinkman

David C. Salomaki,

Douglas A. Knowles,

Prof. S.J. Weininger

Alan Briggs, Jim Grasso,

John Casey, Mgr.; Ken Fox

Ken Dunn, Mgr.; Ed Robillard

payable to Business Manager.

WPI Newspeak Office

Tel. 753-1411 Ext. 464

Garret Cavanaugh, Mgr.; Tom May

Goldberg, John Aubin, John G. Yamashita.

roast beef gets too cold, you can always warm it up over the candle. Then there's the appetizing way almost anything looks-in water. (Lasagne, beef stroganoff, egg rolls, spaghetti). Once I asked specifically for something drained. She sloshed whatever it was onto my plate mumbling something about them complaining when it's all dried out. Such artists.

Then there's my pet "the bitch". This lovely little lady can offer indigestion when the food is having one of, its better days. I've heard her dissertations on coming into lunch at 1 o'clock, and you didn't just get out of class, why you cannot have two pieces of pizza like everybody else after waiting for fifteen minutes, that we're not supposed to use the big bowls for breakfast, why we don't have peanut butter and jelly and marshmallow fluff out during dinner time. Her words can lend an air to the atmosphere of our cafeteria, I know her shadow has darkened the table I'm at a few times.

To end on a positive note, daka is a step in the right direction. However, because management changes and the personel doesn't, there can't be that much improvement. College food does have a reputation to uphold. And remember the words of that great German philosopher, Bruno Samartino, "Tums for the Tummy!"

WPI NEWSPEAK

753-1411, Ext. 494

John C. Matte, Jr.

753-1411, Ext. 516

Co-Editors-in-Chief

WRITERS THIS ISSUE:

Pierce, Mark Martowska, Neal Wright, Bruce D'Ambrosio, Len

STAFF THIS ISSUE:

Prof. Joseph R. Mancuso, Brian Mellea, Rick Dew, Gardner

Judy Nitsch, Khan Thran, Paula Fragassi, John Suomu, Paul

The WPI NEWSPEAK of Worcester Polytechnic Institute,

formerly The Tech News has been published weekly during the

academic year, except during college vacation, since 1909.

Editorial and business offices are located at the WPI campus, West

St. Second class postage paid at Worcester, Mass. Subscription rate

\$4.50 per school year; single copies 20 cents. Make all checks

Sunshine

Managing Editor

Features Editor

Photography Editor

News Editor

Sports Editors

Business

Advisor

Circulation

Advertising

Editorials

Plan vs. Pass - Fail

The grading system used for Plan students has been hotly debated in recent months. Unfortunately, much of the debate springs from an article critical of Pass-Fail grading systems published in the Newspeak shortly after Thanksgiving and articles similar to that one published elsewhere. Most of the articles, in condemning Pass-Fail grading, do not distinguish between WPI's (two passing grades) grading system for Plan students and genuine Pass-Fail grading systems. It is an important distinction.

The published opinion of the Law School Data Assembly Service concerning WPI's grading system and the Pass-Fail grading system provides an example of the differing respect for and treatment of the two grading methods. By way of background, "The Law School Data Assembly Service was initiated in 1970 by the Law School Admissions Council to assist the admissions staffs of individual law schools. By providing participating schools with a summary of an applicant's academic work, copies of his college transcript, and his LSAT Score, the service relieves the clerical staffs of law schools and allows admissions committees to devote the time required for careful individual evaluations...

"Given the great diversity of undergraduate grading systems and measures of credit, the Council chose to report the 4.0 (high) form for grades and semester hours for measures of credit.

Law and Medical school acceptance officers tend to feel especially comfortable about using only traditional data to analyze candidates for admission.

The Law School Admission Council has published a rather lengthy and forceful statement disparaging Pass-Fail grading. A portion of that statement

"Where an applicant for admission to law school submits a transcript in which all or virtually all of h grades are on a Pass-Fail basis, and submits no other indication of his level of achievement in college, the admissions committee can make little use of h college work in predicting his law school grades.

But it is of crucial importanct to note also that the Law School Data Assembly Service has provided for the conversion of "grades earned in other less common grading systems with more than one passing grade" into a 4.0 scale. Their table for conversion reprinted below. Four Passing Grades

Highest Passing Grade joyed Second Highest Passing Grade hidde Third Highest Passing Grade chair Lowest Passing Grade cooki **Three Passing Grades** rides Highest Passing Grade highli Middle Passing Grade visit 1 Lowest Passing Grade enjoy **Two Passing Grades Highest Passing Grade**

Lowest Passing Grade The conversion seems more than fair. Industry and other schools may vary the conversion, but a similar conversion is often made.

The message there is clear. A fundamental distinction has been made between genuine pass-fal grading and WPI's (two passing grades) grading

Epsil

party

ceste

arriv

Neigh

to tha

gener

avail

TH GU

recen

office

Presi

Treas

Secre

Socia

The

exten office

FI

Vice

Ripping Off Spag's

Probably THE most popular shopping spot for WPI students in recent years has been the discount jungle on Route 9 called Spag's. Unfortunately, it has also become the most popular target for WPI students to stage a rip-off. The problem of shop-lifting at Spag's has become enormous and Tech students have had an active role. There are three misconceptions commonly held among Tech students which perhaps account for Spag's popularity in WPI rip-off circles:

1. "Spag's has hardly any security, with all those people around I could never get caught." This statement is far from the truth. With numerous plainclothes security men and women, closed circuit television, and one-way mirrors throughout the store, Spag's has one of the best security systems in the

2, "Mr. Borgatti (also known as Mr. Spag) the owner of Spag's is a tight-fisted millionaire who deserves to be ripped-off." Again not true. While it is certainly true that the owner of Spag's is a successful capitalist with a few bucks in his pocket he's by no means tight-fisted. Mr. Borgatti has been an active and generous participant in community affairs for many years. Besides outright gifts of money, and merchandise to such affairs as our student-run Marathon Basketball Game, Mr. Borgatti, and I staff (even his Chief of Security) have spent man hours working with students in course work at WP

3. "Even if I do get caught stealing something, all have to do is whip out my Tech ID, and I'll be hon free." This may have been true in the past, but no any more (Sorry, the party's over). In past year Spag's Security has been uncommonly lenient to WF students, but the days of "Oh, he is a good little Tecboy, we'll let him off this time." are gone forever. A the number of WPI students caught shoplifting h been on the rise, Spag's Security Chief's patience ha been on the decline. According to reliable sources Spag's The old figure that one percent of shop-lifter are prosecuted is in for a drastic increase.

Next time you are in Spag's and the thought cross your mind to rip something off, whether it be a 15 ce screen for your hashpipe, or a \$10 tennis racket remember two things: 1. Shop-lifting is a crime and I Sooner or later you'll get caught. If those two fact aren't enough to make you dismiss the evil though keep in mind that if you are caught, there is a Goo chance you'll be prosecuted and a simple "The dev made me do it!" explanation won't keep you out

Worcester County Jail.

DHB Case

The Dormitory Hearing Board heard a case concerning misuse of a drug prior to Christmas Recess. The student was smoking a marijuana cigarette between two buildings on WPI property when he was stopped by Security. After the hearing was concluded, the student submitted the following letter to the committee.

"Now that it's down in official black and white in the Newspeak that around half of us (at least) took up once in a while, some of you may be wondering what the administration thinks about it. You should get a copy of the WPI Drug Policy. It clearly calls for discretion on the part of the user, particularly the fourth part. Once I was taking a stroll with a joint on campus, and I have seen other people do this too. I can strongly advise against doing this, as I got picked up by Security. While I didn't get thrown in jail, I certainly had to go through a lot of hassels that made the whole thing not worth the trouble. The point of all this is that if Security, RA's, etc. can't see and-or smell it they don't know it's there."

We feel that WPI students should familiarize themselves with the WPI Drug Policy.

The Dormitory Hearing **Board Committee**

Do you have experience writing for print? Did you work for your high school paper, literary review or

We need people with writing experience or those

Newspeak is the weekly newspaper of the Worcester Polytechnic Institute. We cover campus and community events, and we try to bring a fair assortment of interesting and important stories from outside the College, too.

If there are stories or issues you'd like to see us cover, if you have suggestions or comments on our coverage, or best of all, if you'd like to join our staff, please drop by our office or call Jon Anderson, managing editor.

> Alden Memorial Auditorium Call 753-1411, Ext. 464 Box 2472 WPI

yearbook?

To th I h respo Facul The inacc value facts. Mr resea who would like to get some. of th relati dama WPI Newspeak

and v thesis enoug any v have paper chror marij scare porte dama Mr. and

how physic exten alcoh (phys decad to not in mo time. repea more Marij Leste

As tellige

temen school l of hi

o other

of his

ides.

iss-fai

J.T.A.

t mar

15 cer

racket

e and !

o fact

hough

a Goo

ne dev

1 out

a us

our

Interfraternity Council Corner

Worcester Polytechnic Institute

Brings Cheer

ded for On December 19, Sigma Alpha r less psilon held its annual Christmas arty for the children of Worsion isester. Fifteen young children rrived from the Green Island leighborhood Center. They enyed themselves by hunting for 3.0 idden candy, playing musical hairs, eating ice cream and okies, and receiving piggy back des from the brothers. The 4.0 ighlight of the afternoon was a sit from Santa Claus. It was an 2.00 njoyable afternoon for all.

Sigma Alpha Epsilon would like thank the following shops whose generous giving made presents available to all who attended THE WINDSOR BUTTON SHOP **GUYS AND GALS** SPAGS rading

IFC **Elections**

To start the year off, the I.F.C. ecently held elections of its new e homefficers. The 1974 officers are: but no President, Mike Parker, LCA years Vice President, Ron Materniak, to WP, FIJI le Techtreasurer, Rick Aseltine, FIJI

ver. Assecretary, Jim Hall, ATO ing hasRush Chairman, John Casey, PKT nce ha social Chairman, Alex Vogt, FIJI The new officers would like to o-lifter extend a very special thanks to the officers of 1973, and hope to concross

WE DARE YOU!

Sigma Alpha Epsilon

Once again challenges any Fraternity to give more blood than we do on a percentage basis (counting all active brothers and pledges). 88 per cent won it for us last year . . . We look for 100 per cent. Do you?

1/2 Keg to the Winner

We have won the Blood Drive Trophy for the last six years and don't plan to give it up without a fight so

GIVE BLOOD



and for 1976 Santa....

tinue the excellent job they have strong service organization it now done in making the I.F.C. the

Finally the evaluation forms are

returned to the faculty so that they

will see what they have been doing

wrong and hopefully improve their

Anyone can see the results at the

above mentioned places. If you

method of teaching.

More Letters

Pritchard Scored

the Editor:

I have written this letter in sponse to R. W. Pritchard's aculty Pen in Dec. 19 Newspeak. he article is overflowing with naccuracies and smattered with alue-judgements pawned off as acts.

Pritchard mentions esearch done by Mr. Hardin Jones the Univ. of Cal. Berkeley, elating pot smoking to brain amage. Mr. Pritchard, however, unable to substantiate this claim nd when I checked Dr. Jones' hesis, I found he had not given nough related information to yield ny validity to his argument. (I ave been asked not to quote this aper.) Pritchard also mentions Nor- hromosome damage due to and marijuana use (shades of the LSD care), which is also poorly suported. (Besides, chromosome amage is not intrinsically bad.) Mr. Pritchard attempts to show ow marijuana usage affects hysiological functions to a greater

> lcohol addiction (physiological) "marijuana addiction" physiological). His statement that ecades of alcohol use is necessary o note brain damage can be noted moderate users in a far shorter ime. Comparison of marijuana and alcohol dangers has been epeatedly shown alcohol to be the nore dangerous drug. (see larijuana Reconsidered by Dr. ester Grinspoon)

xtent than alcohol. He parallels

As a final insult to WPI inelligence, Mr. Pritchard makes grossly unjust value judgments. He states, "...the sober alcoholic has insight into his problems. Whereas, the sober cannabis user has none", and also that the marijuana user "....just forgets to care about others and often he doesn't care about himself either. He usually becomes unkempt, and isn't concerned with his health."

Absurd statements such as these, made in a factual vain, can only show emotionality and irresponsibility not befitting to the Chairman of the Drug Education committee of the NCAA

have any comments about the evaluation forms please contact one of the members of the Com-

John L. Bunzick

Bob Fried

of Faculty.)

mittee on Student Evaluation of Faculty. My box number is 806. Thank you. Yours truly,

(Student representative to the Committee on Student Evaluation

Massachusetts Red Cross Blood Program Blood Donor Requirements

A donor must be in good health to donate blood. Red Cross trained Registered Nurses will evaluate all donors individually and confidentially to determine whether they should donate.

NOURISHMENT:

Blood donors should eat a regular well balanced meal either breakfast, lunch or dinner within four hours prior to donation. Do not attempt to donate with an empty stomach. Avoid fatty foods such as butter, cream, ice cream or eggs.

WEIGHT:

Both men and women must weigh at least 110 pounds.

SLEEP:

Normal rest the night prior to donation.

17 years up to 66 years. Those 17 years of age must have written permission of parent or guardian. Those 66 years or over must have a statement from their personal physician written two weeks of date of donation.

JAUNDICE AND HEPATITIS.

Anyone who has ever had an attack of these diseases cannot be accepted as a donor.

MALARIA.

Anyone who has had Malaria may donate after three years. Anyone who has taken supressive drugs may donate after discontinuing drug therapy for three years, provided there has been no malarious episode. Travelers from malarious areas are acceptable six months after return if no episode has occurred.

CANCER

Anyone who has had cancer of any kind, other than skin cancer, cannot donate. Healed skin cancer may be accepted under certain circumstances. The head nurse will evaluate.

EPILEPSY

A donor who has had epilepsy or seizures in any form cannot be accepted.

INFECTIOUS MONONUCLEOSIS

A person must wait at least 6 months after recovery so long as there was no jaundice. HEART DISEASE

Heart disease of any kind is permanent deferral. Uncomplicated Rheumatic Fever does not defer the donor. Donors with a resultant heart murmur from Rheumatic Fever should bring a

note from a physician stating that it is safe to donate.

CHRONIC SINUSITIS AND HAYFEVER

Donor is accepted if symptom free on day of donation and off medication for 24 hours. Seven day waiting period after desensitization shot.

PREGNANCY

Donor not accepted during pregnancy or for six months thereafter.

DIABETES

May donate only if he takes no medication - is controlled by diet.

SURGERY

Not accepted as donor for six months following major surgery or serious illness. Serious accidents require adequate waiting period. Any receiving a blood transfusion must wait 6 months before donating.

SHOTS

Immunization shots, including flu, and polio medication - requires hours waiting period. Desenitization shot for allergy requires 1 week waiting period. Smallpox vaccination (or after scab is off) and yellow fever shot requires 2 week waiting period. Rabies shot requires I year waiting period.

ULCERS

Conditions must be evaluated by head nurse since many factors are involved.

DRUGS

In order to evaluate the prospective donors medical history, the name of any drugs taken must be known. Antibiotics taken by mouth require a minimum of 2 weeks waiting period, except tetracycline for acne which requires only 48 hours. Shots of penicillin require 1 month waiting period.

FREQUENCY OF DONATIONS Eight weeks must elapse between donations. For the protection of the donor, no more than 5 donations in a 12 month period can be made.

(Scuba divers must wait 12 hours, and pilots must wait 72 hours after donation before resuming such activity. 12 hour waiting period for those climbing ladders or working in high places.)

Any questions as to acceptability must be evaluated and decision made by head nurse.

Revised November, 1973

Faculty **Evaluations**

To the Editor:

Many students are probably wondering what happens to the evaluation forms that we fill out at the end of each course. Well, here is what happens.

The results are tallied up, printed, and then distributed to each department office, the library, RA's, President Hazzard, Vice President Bolz, Dean Grogan, the scheduling office, and the members of the Committee on Student Evaluation of Faculty (Dean van Alstyne, Prof. DeFalco, Mr. Herbert, Prof. Hilsinger, Mr. Hunter, Prof. Sondak, Prof. Zwiep and myself). The administration looks over the results and takes what action (if any) that they deem necessary.

To Fellow Drivers

Of all important concerns today, it may seem trivial to suggest that you (re) read the WPI Parking and Traffic Regulations (copy available at Security). I am suggesting this as I recently noticed a small stack of unpaid parking tickets at Security (for parking "illegally" in front of the library). I noticed these when I paid mine, and feel I might be able to save someone some bother, and money.

If you ever noticed the area in front of the library, it might seem to you that you could park off to the right and not interfere with, or block anything, even in the event of an emergency. If you are a driver wishing to park, the normal procedure is to locate a suitable spot and see if there are any obvious (signs, blocking someone's way, etc) reasons prohibiting parking there and if not, fine, you park. This "real world"

convention does not work too well at WPI, where instead of being told where you can't park, you are told when you can park, as well as the idea that not parking in a marked area will be enough justification for receiving a ticket. In other words, park only where it is specifically marked, everywhere else is

My point is, watch where the heck you park, no matter what part of the campus you're on, because Security officers (who are doing their job) are also watching, A little prohibitive sign or paint on the ground might have saved me a couple of dollars, but if I can save someone from "making the same mistake once", it was worth it. 'Nuff said,

Bob H.

Mason

History of W.P.I. -

W.P.I. Newspeak

Editor's Note: The following is the involved the manufacture of tin first in a series of articles edited by Jon Anderson from the TWO TOWERS, a history of WPI for sale in the bookstore.

No, they didn't want the school. The town was noisy enough, what with the hammering down at the tinshop making a rhythm to which Templeton had adjusted its pace for forty years.

It wasn't that the townsfolk were ungrateful to John Boynton or that they were unsympathetic to education. They had supported a high school for several years, long before other towns of their size had voted such munificence.

But there was now a rumor that Mr. Boynton intended to establish a special kind of school, different from the public schools, for boys who planned to be manufacturers and mechanics, or even farmers, instead of lawyers, clergymen, or physicians. No wonder the townsfolk of Templeton declared it "all nonsense." What was wrong with the old apprentice system that had served so long so well?

No, they really didn't want the

But they might have to take it, because no one was in a position to refuse Mr. Boynton. There was scarcely anyone in town to whom he had not loaned money at one time or another. Even the town had borrowed from him, and the State, and other towns, and other States. For two years he had been president of a bank. He was listed as owning more than one-eighth of the town property. And the books in the County Courthouse revealed him as being the grantor and grantee of nearly one hundred and fifty pieces of land. Mr. Boynton lived now in

Leominster with relatives of his first wife, but he often came back to visit the town which had, for him, "opened the door of opportunity." Sometimes he traced the trail back to the day in 1825, when he had first arrived in Templeton. As miles go, the little town had not been far from his New Hampshire home in Mason or from New Ipswich, where he first learned about makii tinware. But it had been far enoug away to give him, at thirty-four, a new start in life and to initiate many another future far off into other centuries.

When John Boynton started his shop in Templeton, there was no more promising a business in America - for two reasons. It

products and it involved peddling.

Tinware had just begun to supersede crockery. This was no light succession, for compared to the thousands of ingenious articles used by the householder in the eighteenth century, the gadgetry of the twentieth seems almost inconsequential.

Before 1820 the few pieces of tinware in this country were considered as treasures, high priced and highly prized. With the importation of cassiterite, the raw material from which tinware is made, and the discovery of a small quantity of it in this country, tinware became popular. Its shiny cleanness appealed to housewives who were tired of the drab pewter. black iron, and heavy crockery with which their buttery shelves had been burdened.



Making tinware was an extremely uncomplicated process, requiring no more than an anvil, hammer, and a charcoal fire to heat the soldering iron. In fact, John Boynton had first set up a shop in his own room at the Templeton Tavern. When later a device was invented by which it was possible to stamp out the pieces of tin (much as if making a batch of cookies), production began to catch up with demand. Tinware became less costly, more decorative, and John Boynton erected two shops, one for stamping out the tin and the other for adding color and design.

Templeton became a prosperous town. It had no more people than did Worcester, the shire town of the County, but far greater promise, chiefly because it could boast of almost twice as many mill privileges as could Worcester.

Moreover, there were many valuable by-products from the tin shop. Scores of townspeople worked in the shop itself, hammering, soldering, varnishing, and polishing. There were always "floaters" who roomed and boarded in the big house on the corner of the Common. Then there were the carts, the harnesses, the horses - all necessary for the distribution of tinware — to say nothing of the occupation given to as many as a hundred men on the road, who traveled north to the Canadian line and as far south as

called "pedlars," a word which in a hundred years would change its spelling and lose much of its prestige. In the early eighteen hundreds, pedlars were the proudest men in the land, responsible for much of the country's distribution and communication. Sometimes pedlars acted as real estate agents, arranging for the sale of farms, of livestock, and lumber lots.

Pedlars were always welcome in New England. Never did they have to pay more for a night's lodging than a tea kettle or a dishpan, and these were considered as gifts rather than payment. The business ifself was negotiated with barter of every conceivable product that could be made or owned by a householder.

On Saturday nights the tincarts would rumble back into town dragging an unwieldy mowing machine or hay rake. There were sure to be several hens, a couple of hound puppies, or a turkey gobbler. There were butter and cheese, eggs and maple syrup, butternuts and chestnuts, honey and spruce gum, homespun woolens, furs and mittens, hides and yarns. One pedlar reported his payment ran the gamut from sewing needles to silos. Templeton became a veritable merchandising center, but the chief medium of exchange for the Boynton carts was rags and paper, always in great demand by paper manufacturers.

For twenty years John Boynton's business prospered so handsomely that he decided to retire in 1846. He relinquished the ownership of the shops, but never his interest. This was not an awkward continuation, for the new owner was no one less than his own cousin, David Whitcomb.

By 1864 something was disturbing the monopoly of the tinware shop in Templeton. Every day, when the four-horse wagon with its extended sides made its trips to Otter River to pick up and deliver freight, the townsfolk were reminded of the change. Puffing into town with the steam engine there had come a new way of life. People were moving about with great ease, not only because of

railroads but also because of better Main and Pearl Streets that John roads. Merchandising had been revolutionized by mail order houses such as the Salisbury store in Worcester. And already there were signs that tinware might not always be so popular. Just as in an earlier year, when tinware had pushed crockery and stoneware into the background, it was now feeling the nudge from glass, from steel and from other metals.

Even the town of Templeton had not grown as had been expected. Of all the towns in the County, Worcester had taken the lead, becoming a City in 1848. Now it had as many as 25,000 persons.

It was to this City of Worcester that David Whitcomb moved in 1854, becoming a partner in a business hardware which prospered in spectacular fashion during the Civil War. Now he was working hard to set up the unprecedented manufacture of envelopes. He had arranged to finance a machine which would not only cut envelope blanks but also fold and glue them, all in one operation. But he had not yet disposed of the hardware business. It was in this store on the corner of

Boynton found David Whitcomb one day in the fall of 1864.

So it was, that fall day of 1864, when John Boynton came to visit David Whitcomb. He spoke modestly in terms of "a few thousand dollars." and he mentioned Templeton, or perhaps even

s ha

uitab

For

The

ich W

rticip.

This

For

found

currer

ade for

Pro

Ihave

e Pla

ialogu

conc

alyzii

exams,

ces.

rading

lan ar

meda

aim to

rime

eatht

He could see the wisdom of Mr. Whitcomb's suggestion, however, that Worcester might be a better location. Worcester was becoming a city of manufacturing and needed just the kind of school he had in mind. But he made two strict stipulations. First of all, his part of the plan must be kept a secret. Secondly, he would give the money "for endowment and perpetual support" only if the citizens of Worcester thought enough of the idea to provide the land and buildings for such a

Fair enough, thought David Whitcomb.

It was a secret carefully guarded for almost three years, until after John Boynton's death

He never knew that one day so many people would know.



John Boynton's House in Tempieton. As the house was nearing completion one townsman advised Boynton to build a veranda, so the second story door would open somewhere. Although this had been Boynton's original intention, John Boynton was incensed at the interference and vowed no upstairs veranda would ever be added. No one was going to tell him what to do.

Financial Forum nswer To a Criticis

The Dec. 11 issue of Newspeak carried a criticism of my column by Scott Phillip Wilson. He claims one of my articles had a "section which told how the money was distributed to the different sports was in enough detail so that a student who was knowledgeable of

the sports program could have 'figured out' who had aid." That claim is a lot of hogwash. First of all, I did not say how much money was spent on each sport. I only gave the number of students recommended by the athletic department that were expected to participate in each sport. The average aid per student athlete in each sport varies considerably, not to mention the wide range of package from one student to another. Therefore, assuming for

the moment you could determine who these 39 desirables were, you would be unable to determine which one received what aid. As far as figuring out who has aid, you are at an advantage before

you start. If you claim everyone has aid, you would be right more than half the time. However, you seem to be concerned with the notion that someone can figure out who these 39 desirables are. The only possible ones you might be able to guess at are the two football players that also play baseball, a football player each for lacross and hockey, and a football player who participates in both track and wrestling. To do this, you would

first have to assume: (i) they participate in the sports for which they were recommended by the athletic department;

(ii) there aren't any others who meet the same requirements of participation and receive aid, but

were not recommended by the athletic department;

(iii) there aren't any non-aid ome of students meeting the participation an and requirements;

(iv) all those recommended by a "Wh the athletic department were This eligible to receive aid.

Off hand I can't tell you whether really or not assumptions (ii) and (iii) hanging are valid, but I doubt it. If you assumed (iv), then you are wrong trading already. Assumption (i) would be loyers the hardest to get around, since, as I takes I mentioned in other articles, not lystem all the students recommended by omical the athletic department who The b receive these beautiful packages ittitude actually participate in their chools respective sports.

In short, for you to "know" who myone receives aid, you wo ald have to ask As a that particular person and assume PI wa he is telling you the truth. The rofess school did not "release information fircles. on who has aid and who does not,"

as you implied.

Why didn't you bother to go "into ot the the merits of who should get aid," as tak since that was the main theme of PI th the article? Are you for, or against, My no the awarding of better aid hivers packages based on athletic ability? IIT str Why didn't it bother you that the flan, a swim team didn't have anyone adio si recommended by the athletic his is department? Doesn't it bother you ascuss that your own sport is rated lower Even by the athletic department in this , it w respect?



John Boynton

WORCESTER, Mass. - Worcester Polytechnic Institute tuition has been raised \$150 to \$2900 for the 1974-75 college year, it was announced by President Geroge W. Hazzard. He said it is less than most comparable institutions.

He said trustees voted the increase effective for the college year beginning in September and he said it does not apply to tuition payments due this month for terms

In a letter to parents, Dr. Hazzard called attention to the inflationary pressures on the college, which he said were the same that parents faced in their homes. He said, "We have succeeded over the past several year in holding tuition increases at a level less than inflation rates. We shall continue to make all possible economies while we maintain our goal of serving our students well and treating our faculty fairly."

Dr. Hazzard's letter continued, "I assure you that we will do all that we can to provide appropriate financial aid to all our students in need of it. We continue in our fund raising efforts to seek scholarship and loan funds from both private and government sources.'

FINANCIAL AID

Applications for all Financial Aid for 1974-1975 will be available in Room 304, Boynton Hall, February 15, 1974.

Deadline for applications March 15, 1974.

Includes: Scholarships, Loans, State Scholarship Programs, College Work Study Program, On-Campus, Off-Campus Summer Employment, Dining Hall.

If you have any questions pertaining to any of the above, please contact Mr. E.F. Heselbarth, Director of financial aid, Room 305, in Boynton Hall.

If you have any questions pertaining to any of the above, please contact Mr. E.F. Heselbarth, Director of Financial Aid, Room 305, in Boynton Hall.

John

comb

1864.

VISI

poke

men-

even

f Mr

ever.

etter

ming

and

two

ol he

l, his

ept a

re the

and

the

ught

e the

)avid

arded

after

earing

so the been

he in-

io one

ion-aid

es, not

ded by

who

their

v" who

to ask

et aid,"

igainst,

ability?

hat the

anyone

her you

d lower

few

Projects

Project Opportunity at Honeywell Corporation

Junior and senior students needed to work at the Boston Datacenter. shands-on project will analyze the data collection facilities for the full ge of Honeywell operating systems. Objective is to determine a set of itable cost-accounting algorithms.

For more information: Len Lipner, SL-04E.

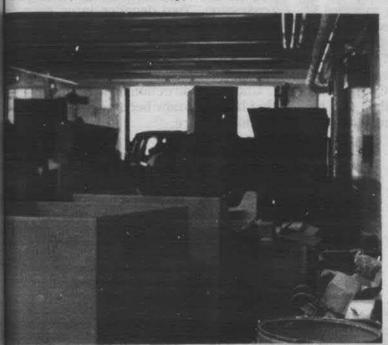
A Project In Air Pollution

Airborne Mercury

Sampling and Analysis

The New England Consortium for Environmental Protection (of ch WPI is a member) is conducting a statewide mercury sampling gram. One student from this area is needed to do local sampling and to ticipate in the date analysis portion of the program.

This project needs a student NOW, TERM C. For details, see Prof. Demetry, Washburn 300.



Joe Mielinski has moved his office to the new projects center in the foundry building. The center, although open for coffee and doughnuts, currently somewhat disordered. Final preparations are now being use for an open house slated to occur on March 6.

Parking Rules

1. Only motor vehicles displaying a current and proper decal will be permitted to use the designated areas on the campus. The decal should be placed on the inside of the rear window on the right or curb side of the vehicle

2. Decals may be obtained by both staff and students by filing an application with the Campus Security Office. A driver's license and automobile registration are necessary.

3. Faculty and staff parking areas are marked on both the EAST and WEST Campus.

Faculty and staff shall not use the student parking areas for the same reason students are prohibited from using faculty or staff parking areas.

Students, graduate students, and teaching and research assistants are permitted to park on the WEST Campus in areas so marked and on the EAST Campus in the Library lot in areas so marked.

6. Cars must park within marked lines

7. No campers may be parked on campus.

All motorcycles must park behind Higgins

9. No overnight parking is permitted on the EAST or WEST Campus except for emergency situations, in which case Security must be notified.

10. A three-inch snow fall will require plowing operations. This may take place between 5:00 p.m. and 8:00 a.m. on weekdays and from noon on Saturday to 8:00 a.m. on Monday on week-ends. NO vehicle will be allowed to be left on campus overnight unless the Campus Security Office has been notified and proper arrangements have been made. Abandoned vehicles will be towed away and the owner

Registration of Vehicles

All students with motor vehicles and-or motorcycles at college must register them with Campus Security whether permitted to park on campus or not. There is a \$2.00 fee per vehicle.

Undergraduate Students: Freshmen who are living in the dorms are not permitted to have cars or any type of motor vehicle either on or off campus. A sophomore, junior, or senior living in the dormitories or within one-half mile radius of the campus may bring a motor vehicle to college but will not be permitted to park on campus.

All graduate students and assistants may obtain decals regardless of where they live, but they must park in regular student lots.

Registration Hours: 8:00 a.m. to 4:00 p.m. at the Campus Security Office, Stratton Hall.

Required Information: Driver's license, vehicle registration, and a student identification card.

NOTE: Any student permitted to have a motor vehicle, on or off campus, which is licensed out of the state of Massachusetts MUST fill out a Non-resident Student Vehicle Information Form, which can be obtained from the Campus Security Office. This is required by the laws of the Commonwealth and no fee is charged for this state decal. Traffic Rules

Campus speed limit is 15 mph.

Observe campus stop signs.

3. The Institute assumes no responsibility for fire, theft or other damages to motor vehicles or personal

4. Driving or parking on walks, paths, and normal lawn areas is prohibited.

5. Obstructing entrances and loading areas is

6. Motorcycles and motor scooters are prohibited

on the EAST Campus. Motorcycles are to be parked on the sest side of Higgins Laboratory.

7. Repairing, washing, or waxing motor vehicles on either the EAST or WEST Campus is prohibited.

8. The college has the legal right to order cars towed away under serious conditions

9. Any area NOT MARKED with lines is a NO PARKING AREA.

10. No overnight parking is permitted on the EAST or WEST Campus except for emergency situations, in which case Security must be notified.

Violation of any of the above rules will be subject to an Institute traffic ticket. A person receiving an Institute ticket must report to the Buildings and Grounds Office within 7 days.

Fees and Penalties Registration of all vehicles \$ 2.00 Giving false address for purpose of obtaining a WPI parking permit \$10.00 Each offense (if paid in 7 days) \$ 3.00 Each offense (if not paid in 7 days) \$10.00 Parking a non-authorized vehicle \$10.00 Snow removal violation \$10.00

Speeding or operating negligently Parking fines will be paid at the Buildings and

\$ 5.00

Failure to pay fines will result in loss of driving and parking privileges on the campus. Loss of privileges does not cancel the liability for fines. The Security Office will refer all violations not paid within 7 days to the Bursar's Office for collection

Students who fail to pay fines will not be eligible to register or to receive grades, diplomas, transcripts, or any other official document of the college

The Security Office is authorized to obtain listings from the Registry of Motor Vehicles and assess charges to the violator.

In case of extenuating circumstances concerning a legitimate reason, please contact the Security

The Faculty Pen

Processor Joseph R. Mancuso

lhave been intrigued by the criticism and praise of e Plan in the last few Newspeak issues. The alogue is healthy. My intrigue turned to concern as concluded the dialogue had degenerated to alyzing what I consider second-rate issues. Seven terms, grading systems, IPI, competency the tams, and all that, are not the Plan - they are only ces. The whole of the Plan is sound, and, while e of the pieces are still being formulated, the Plan pation in and will work. So, let's stop worrying about the le pieces and face what I call first-rate issues such "Who cares if the Plan does work."

were This issue emerged for me when the various iding systems were proposed. I don't know which hether really the best grading system, but the criteria for d (iii) langing triggered my realization that we were not If you king up to the bigger issues. Let's change the ading system because graduate schools and emyers can't understand it, is the current reasoning. nce, as takes Boynton Hall too long to explain the grading stem to these outsiders. That strikes me as mical.

> The big issue I mentioned earlier emerges in this litude. Maybe we ought to consider telling graduate bools and employers about our grading system, our in and our School. Doesn't that make sense to one else?

As a student at WPI, 15 years ago, I used to think issume PI was the best kept secret in the world. But, my fessors told me "It's well known in engineering cles." Being only a student, I nodded and figured mation meday I'd meet an engineering circle and find this m to be true. Today, I have concluded that WPI is o "into the best kept secret in the world, the WPI Plan taken over that spot. More people have heard of eme of PI than have heard of the WPI Plan.

My neighbors never heard of the WPI Plan, Clark eversity students think the Plan is a mini-course, T students never heard of WPI, never mind the n, and convincing most people that WPI is not a to station is a chore all by itself. In my opinion, thletic is the big issue and the one which should be

Even if the WPI Plan does work, and if we keep at in this it will; who cares. Few know we are even eximenting and, consequently, are not athtakingly awaiting our results.

Let's settle on which of the pieces work best (7 or 10 or 14 weeks) and get it all together - but let's not forget to tell someone. To say a few engineers invented an intriguing new product in their basements and never told anyone would be an old Route 128 story. While we concentrate on making minor internal adjustments to perfect our product, maybe we ought to think about freezing the design and going to market. We'll never attain a perfect product and we'll probably only make few significant improvements in the next four or five years. You know, most colleges are satisfied with a second best product and a good marketing program. Just look around and you'll conclude they are doing very well with this combination. At WPI, we're keeping the Plan quiet until it works perfect and then, and it's only a maybe, we'll tell a few close friends. That, in my opinion, is the big issue.

The fact is WPI has a darnn good unique and marketable product. Better than we've ever had in the past. Better than competition save a handful. So, let's sell it! Let's tell people.

You see, the Plan just might be the wave of the future. It might be perfect right now!

Even if it is - who'll care. If it isn't - who'll care. No one knows what it is, never mind if it works.

I doubt that the WPI Community has properly evaluated the importance and timing of this issue. If we don't hurry the "MIT Plan" could become the innovative wave of the future. WPI should reallocate its priorities. It must change its resource allocations. A budget, and a \$500,000 budget is small, in my judgement, must be established.

With this new attitude, our promotional program can go from a low F in marketing to an acceptable. And, if they hire professionals and do it right, they have a shot at an A-D. I hope they get as high a grade as possible, WPI deserves it. And the time is vesterday.

> Student Gov't Meeting Wed., Feb. 6th in the Library Seminar Room at 7:00

If you cannot attend this meeting, send a proxy, and inform either Dave Lape (Box 1255) or Ted Ledden (Box 1280). See you there!

Activity of Student Life Committee

by Brian Mellea

The SLC has held 5 meetings to date. The first meeting consisted of defining what the committee's responsibilities After are. discussing the definition in the faculty by-laws (pg. 12), it was informally decided to debate 'evaluation of current practices... in discipline, financial aid,..." because the studentfaculty committee on financial aid and the student court handles discipline. We also sent a notice to be placed in the WPI Newspeak describing our function and asking for student input. We received no replies.

After this essentially organizational meeting, the next four meetings were to explore topics to act on for the year, to educate ourselves as to what is going on on campus relative to these topics, to find out how the Bonyton works and how to input into the decisions that are being made there.

A preliminary list of topics was drawn up at our second meeting. In the area of student environment: parking, housing, the "wedge", student communications systems. Under extracurricular: tellectual persuits at WPI (A la

NOTICE

From: Jeffrey E. Shaw, **Director Graduate & Career** Plans

Deadline for applications for the scholarship being offered by the Consulting Engineers Council of New England.

The deadline has been moved ahead to February 20,

See Jeff Shaw for details.

WPI Plan Objectives (esp. in the area of humanities)). Further, athletics: varsity sports at WPI, phys. ed. requirements, more effective usage of WPI athletic facilities. Dean Reutlinger told us that a committee investigating varsity sports and its role at WPI will be reporting to the trustees in June and wondered if we would like to meet with the committee. It was hoped that undergraduate summer employment via the committee would be discussed. In the area of counseling services: education, vocational counseling and advertising of counseling services presently available.

In the following meetings to date, the committee has discussed these areas further. Much discussion centered around the physical changes to the campus environment especially the Pub, closing of West Street and the greening of the campus. As a result of this, Mr. Gardner Pierce, Director of Planning, came and spoke to us. Topics included residence facilities, the "wedge", project centers, prospects for closing West Street, renovation of Salisbury building, student-faculty at Morgan Hall and the Pub. It was found that WPI had \$25,000 to build a new Pub with and the location of it was the major problem. More importantly, the decision making process relative to these changes was also discussed and in our next meeting it was discussed more fully with Dean Reutlinger. One of the major problems is that SLC has no authority, it can only advise. Another major problem is "lines of communication" - whom to talk to to provide student-faculty reactions via the SLC into the decision-making in Boynton.

William Friedkin Residency

Since man first believed in demons, he has also believed that these malignant forces can take possession of him. And since man's earliest conviction that he could control his fate, he has conducted rites of exorcism to purge evil from those possessed.

Exorcisms date as far back as ancient Egypt but did not flourish until the Middle Ages. Because pagan influences gradually perverted the ceremony, its uses and techniques were regulated by the Roman Catholic Church with the 1614 publication of the "Rituale Romanorum." Since then, exorcisms have largely been performed in secrecy, and reported modern instances are rare.

Perhaps the most widely publicized exorcism in 20th-century America occurred in 1949, when a Jesuit priest expelled a demon from a 14-year-old boy living in Mt. Rainier, Maryland. In an August 20, 1949, Washington Post article, the case was conservatively described by staff reporter Bill Brinkley as "perhaps one of the most remarkable experiences of its kind in recent religious history."

The boy's possession was first noted in a series of mysterious manifestations — scratching and marching sounds under his bed, furniture sliding across his room, the tilting of a chair on which he sat, the levitation of objects about him. When these witnessed phenomena were accompanied by livid red eruptions on the boy's body, his parents consulted numerous medical and religious authorities, but no explanations or cures could be found for the increasingly frequent horrors.

After obtaining permission from his archbishop, a priest conducted nearly 30 rites of exorcism over the next two months. While the religious ceremonies were being held, the boy would curse, fight and kick those around him. During some of these violent scizures, he also spewed Latin phrases that he had not previously known.

Finally, after reading of a similar case 75 years earlier in Wisconsin, the officiating priest forced the boy to wear a chain of religious medals and hold a crucifix in his hand during the exorcism. The boy responded with greater violence than ever, and five Alexian Brothers were necessary to constrain the youngster's nearly super-human strength. Following an especially severe spastic bout, the demon announced himself through the boy's lips and then departed.

Today, that boy is a happily married 38-year-old man with no recollection of the three months in which the demon took command of his body—if in fact that is what happened. The priest's account, now lodged in official Roman Catholic archives, evidences no doubt that the boy was diabolically possessed. Modern

science, however, has a battery of possible explanations and cures that might has alleviated the youngster's suffering.

As far back as 1583 the Church herecognized that most cases of possession probably allow a psychiatric explanation and the "Roman Ritual" cautions again misinterpreting psychotic or neurol symptoms as justification for exorcism, addition, recent research in such nefields as psychosurgery, arteriograph and parapsychology may lead to successful diagnoses and treatments supposed cases of possession. For the moment, however, science has not found completely plausible explanation for the strange incidents surrounding the adolescent boy in Mt. Rainier, Marylan

w se m

di

m

lo sa al

ye

fo

cl

no ba

Far

po th th bu

hu

iss

M

be

He

eth

wh

tol

try

on

wa

the Wi

wit

cor

wa

car

fat

the

the

rid

cus

ma

pa

ret

ass

fire

oil

fro

While still a student at Georgetov University, William Peter Blatty read the unusual episode and becam fascinated with the subject of diabolic possession. Two decades later he transmuted the 1949 case into "The Exorcist," novel that sold over 6,000,000 copid domestically and has been translated in 181 languages.

Under the direction of William Friedki that book has now become a Warner Bro motion picture.

William Friedkin, the 33-year old film maker who has directed "The French Connection" and the currently controversial "The Exorcist," will be in Worcester February 7, 8 and 9 to speak on the campuses of Clark University, Holy Cross College and Worcester Polytechnic Institute.

Friedkin will be at the three institutions as a Resident in Fine Arts, a joint venture made possible by monies from a Mellon Foundation grant. He won the 1972 Academy Award as best director for "The French Connection" and the Directors Guild of America Award as Best Director of the Year.

He spent most of 1973 directing the filming of "The Exorcist," a Warner Brothers dramatization of the best-selling novel by William Peter Blatty which Friedkin filmed in Iraq, New York City and Washington, D.C. The story deals with attempts to save the life of a 12-year old girl thought to be denomically possessed. The film will open February 6 at a Worcester movie theatre.



Program

WILLIAM FRIEDKIN RESIDENCY FEBRUARY 7, 8, 9

Wednesday, February 6

8:00 p.m. — "Birthday Party", Clark University, Atwood Hall

Thursday, February 7

1:00 p.m. — Film Seminar at Holy Cross, "Film As Theatre", Hogan Campus Center Ballroom 3:00 p.m. — Coffee and Conversation at Holy Cross

8:00 p.m. — "The Boys In The Band", WPI, Alden Memorial

10:00 p.m. — Beer and Conversation, The WPI Pub

Friday, February 8

9:30-11:00 a.m. — Mr. Friedkin will be available for private interviews

10:00 a.m. — "The Paul Crump Documentary", Room 320, Academic Center, Clark University

11:00 a.m. - Friedkin comments on Documentary

1:00 p.m. — Panel discussion, "Film, Art, and Society"; Freedom and Responsibility, Clark University, Little Commons

3:00 p.m. — Reception at Clark University 8:00 p.m. — Major Address by William Friedkin, "Censorship and the Code". Holy Cross, Hogan Campus Center Ballroom

Saturday, February 9

2:00 p.m. — Introduction of "The French Connection" by William Friedkin followed by showing of film, WPI, Alden Memorial 7:30 p.m. — Informal comments by Mr. Friedkin previous to the

showing of "The Night They Raided Minsky's", Holy Cross, Kimball Auditorium
8:00 p.m. — "The French Connection", Clark University, Atwood

Hall. Followed by Pub Reception at Clark University

Thursday, February 7

1:00 p.m. — Film Seminar at Holy Cross, "Fi as Theatre", Hogan Campus Center Ballroo +Bus leaves WPI at 12:30 p.m. and returns at 3: p.m.+

Friday, February 8

1:00 p.m. — Panel discussion "Film, Art, a Society"; Freedom and Responsibility, Cla University, Little Commons. +Bus leaves WPI 12:15 p.m. and returns at 3:45 p.m.+

Friday, February 8

8:00 p.m. — Major address "Censorship and Code", Holy Cross College, Campus Cent Ballroom. +Buses leave WPI at 7:15 and 7: p.m. and return at 10:00 p.m.

Priorities for seats will go to the students, facult and staff at the three colleges provided 1.D.'s ar

King of the Comics!

Feb. 5 - Alden

Stan Lee is to comic books what Joe Namath is to football or John Wayne is to Western movies. Stan Lee could easily be billed as King of the Comic Books and he is flesh and blood, not pencil and paper.

35 years ago, when he was 17, he joined what was then known as Timely Comics as a combination script writer-artist and go-fer. "Whenever they needed somebody to go-fer coffee or sandwiches, they sent me." Timely changed its name several times in the ensuing years, but Stan Lee worked himself into the editorship of the publication put out by his company. In 1972, he became publisher of Marvel Comics.

Marvel was the company's name 12 years ago when Lee decided to do something different with comics. "The old comics were all the same. The same dialogue, the same plots, the same BEMs (bug-eyed monsters). It was believed that anybody over 14 looked down their noses at comic book readers," he says. "Then, one day my wife turned to me - she was always looking the other way — and said, 'Why don't you try something new?'"

Thus came the Fantastic Four, which would be the forerunner of dozens of new Marvel creations, including Thor, Spiderman and Submariner. Marvel now cranks out 42 publications a month and Lee has a batch of new ideas under his slowly greying hair that will come to life under his reign as publisher. "It's my turn to be god," he says. With the creation of the Fantastic Four, Lee put behind his dreams of being an actor or author and took the road to becoming a tycoon in the comic book industry.

What makes the Fantastic Four and its offspring different? The realism of the characters that populate the pages of the 20 cent publications. Oh, they can still push over buildings, fly and transform themselves from everyday people into superheroes,

but they have got all kinds of human hangups. The Four were even evicted from the office in one issue for failure to keep up the rent.

Personality clashes and human frailties make the characters in Marvel Comics less than unbelievable. Sgt. Fury and his Howling Commandoes has an ethnic platoon of 2-fisted soldiers made up of a Jew, a Black and several other ethnic groups. Fury was cranked out by Lee in the days when someone else was 'god.' "I told the publisher to think of the worst subject he could and we would sell it with realism. He picked war. I don't like war any better than anyone else. We keep trying to get rid of Sgt. Fury, but people keep buying it.'

With the addition of real people to Marvel Comics, fan mail started to pour into the publications. "The only fan mail we got before that was from people with complaints like one of the staples was missing from an issue that was purchased. People wanted a

fan club. You know, you send in a quarter and vou're a member. We didn't have the time and really didn't want to do it, so I thought we could charge them a dollar. Pretty soon we had 50,000 members. We had to let the club be handled by a California firm that eventually ruined it. Now we've got a new club that will soon be organized. It will be called FOOM."

Marvel and its nearest competitor, National Comics, are more than a passing fad. Students are able to name writers, artists and inkers for the publications. The applause the mustachioed Lee receives when he arrives on campuses prompts him to remark, "Under the right management, Marvel Comic could probably take over the world.'

In the future, Lee sees Marvel moving into movies, TV, hardcover publications and satire magazines "even better than the National Lampoon - with no pornography. I've got to say things my way." Lee trades laughs with students, signs autographs, and discusses the phenomenal popularity of his comics. He admits that he is gratified to know that someone other than small children follow his work religiously and enjoys it. "I want our readers to feel they are part of our family."

The realism that Lee has put into Marvel publications is not a sometime thing. Even Night Nurse, one of the lesser publications, is filled with it. One month, one of the nurses fell in love with a surgeon who was an alcoholic and a drug dealer. The surgeon also struck his best friend's daughter with his car, operated on the girl and caused her death. That's enough realism in 20 pages for anyone - even TV soap opera addicts. Certainly, it's super realism but it beats Clark Kent taking Lois Lane out for a soda and getting a kryptonite straw.



Stan Lee

WASHINGTON - An industry just isn't with it these days if it cannot announce a "shortage." Without a "shortage" there is no corporate chic. For how else can a self-respecting corporation, working with its confreres and trade association, get higher prices, weaken pollution standards, loosen antritrust constraints, drive small business out of business and demand even more tax privileges.

A few days ago I was talking with a publisher who was complaining about the paper shortage. He candidly acknowledged that the shortage was fabricated. It seemed that he went to his supplier the paper mill - where a top executive told him that the plant could double its capacity but that it was making more money at half capacity. It was getting rid of its marginal customers, forcing other customers to buy the paper with the highest profit margins and luxuriating in the cozy fraternity of a paper industry long overdue for enforcement of the anti-monopoly laws. Displeased, the publisher returned to his office and satirically told his assistants: "Well, it looks like we're going to have to fire some of our customers' ...

The phony fuel shortage is already getting the big oil companies what they want in the United States higher prices, skyrocketing profits, less competition from independent small refineries and gas stations if

they're still in business at all, lower pollution controls, pressure for de facto exemption from the antitrust laws and other entrenched powers. Mr. Nixon's energy advisers, who get all their figures from the oil industry, are learning that they have been stampeded into a crisis giveaway response. Suddenly, they discover that 700,000 barrels of oil more a day are being imported than they figured. They learned that tankers and reserve tanks are filled to the gills in U.S. ports. They know that stockpiling and hoarding (of diesel fuel, for example) is going on by these companies. They also know that any amount of oil is available "for a price," that natural gas is being withheld from the market waiting for higher prices, and that tens of billions of barrels of oil remain untapped in exploited oil wells in the Southwest. Predictably, the Nixon men, led by energy czar William Simon, are determined to allow the domestic price of oil to go at least to \$7.00 a barrel by early next year - up from \$4.25 per barrel in early

These so-called public servants are either playing into the hands of the oil industry or are actually doing the industry's job of gouging consumers mercilessly. Either way it doesn't make much difference to workers and consumers who, as usual, will bear the brunt of the oil industry's greed.

FEBRUARY 1974

ART EXHIBITION - by Bruce R. Elliot, H. C. Instructor in Fine Arts. 8 a.m. to 11 p.m. daily in Hogan Center Lounge.

ANNUAL CARL JOHNSON LECTURE (ME Colloquium). Warren P.

Chernock, "Materials for Nuclear Power: Past, Present and Future." Higgins Lab 109. 4:30 p.m.

ALUMNI FUND PHONOTHON - Worcester Area - Boynton Hall, Alumni Office. 6:30 p.m.

WPI FINE ARTS COMMITTEE. Mr. Stan Lee, publisher of Marvel Comics and the King of Comic Books. Alden Memorial Auditorium, 8:00 p.m.

WORCESTER SCIENCE CENTER - Play "Nightfall", based on Isaac Asimov's short story. 9:00 p.m. Tickets \$3.00, in advance only.

MINI-SPECTRUM RECITAL. Harriett Katz, Soloist. Higgins House. 8:00 Thurs. 7

CHRISTIAN BIBLE FELLOWSHIP. Janet Earle Room. 7:30 p.m.

HOCKEY at Fitchburg State College. 7:45 p.m. -BASKETBALL vs. Brandeis. 8:00 p.m.

NATIONAL ASSOCIATION OF POWER ENGINEERS. Morgan Dining Hall. 8:00 p.m.

IFC MIXER. Alden. 8 p.m.

Sat. 9

WINTER MEETING OF THE CORPORATION. Gordon Library Archives Room. 9:00 a.m.

CLARK MUSIC DEPT. presents Susan Fisher Clickner, Mezzo-Soprano. Joann May, accompanist. Little Commons, 8 p.m.

SKI CLUB at Bennington, N. H.

WRESTLING vs. Amherst, Union. 1:30 p.m.

-SWIMMING vs. Nichols. 2:00 p.m. -BASKETBALL vs. Williams. 8:00 p.m.

ZAP FILM: "Judgement at Nuremberg". Gordon Library Seminar Room. 8:00 p.m.

BLOOD DRIVE. Alden Memorial Auditorium. 10:00 a.m. - 5:00 p.m. CHEM. ENG. COLLOQUIUM. Mr. F. G. Shinskey, "The Measurement and Control of Stream Pollutants." Goddard Hall, Room 227. 4:15 p.m. -SPECTRUM 73-74. Jerry Rockwood, "A condition of Shadow", a characterization of Edgar Allen Poe. Alden Music Room. 8:00 p.m.

HOCKEY vs. Clark. Worcester Arena. 8:45 p.m. BLOOD DRIVE. Alden Memorial Auditorium. 4:00 - 10:00 p.m.

LIFE SCIENCE SEMINAR. Dr. Peter Morgan, "Chemical Anatomy of the Brain - Its Relationship to Brain Physiology and Behavior." Gordon Library Seminar Room. 4:00 p.m.

-Events Open to the Public.

STAN LEE of **Marvel Comics** Tues., Feb. 5 8:00 Alden

Mr. Simon has been told repeatedly by his energy conservation advisers that, even with the inflated prediction of an 18 percent energy shortage in the first quarter of 1974, simply cutting out the waste of energy in industry and commerce, together with voluntary consumer thrift, would make up more than that difference. Now the government is scaling down the extent of the energy shortage so fast, one can hardly keep track of the latest official mirage.

The shortage holdup is spreading like an epidemic by those industries who claim it and those industries who feed off it. The drug industry, wanting higher prices, warns of inadequate petroleum products for some of its drugs. The coal industry announces that it can produce much more coal but only if job safety and environment standards are weakened and windfall profits permitted. Few industries are now as profitable as coal but the quest for this brand of collective extortion is encouraged by collusive coal company behavior through the National Coal Association.

Monopolistic practices, industries dominated by a few corporate giants, business subsidies and tax privileges are producing the topsy turvy paradoxes that spell waste, consumer exploitation and the lack of new answers to our economy's problems.

Here are a few of these paradoxes: (1) companies grow by buying (their competitors or other companies) instead of selling; (2) banks, insurance companies and now more industries are dumping what they call "marginal customers"; (3) consumers are asked to buy less gasoline and fuel and then told to pay more; companies make more profit by limiting supplies; (5) corporate profits are at record levels, the balance of payments is markedly improving, real corporate taxes are proportionately lower than in many years, and yet the economy is in serious trouble; (6) companies such as the airlines, given routine cost-plus rate increases, engage in high cost-competition rather than price-competition; (7) firms advertise "tax losses" they want to share; (8) the more electricity companies devour the lower rates they receive in this period of supposed energy shortages; (9) rather than stiffening their resistance to their suppliers, companies find it so easy to transfer the costs of monopoly, waste and inefficiencies to the consumer.

These are symptoms and trends that are making the people get less and less value out of a bigger and bigger economy. What makes this happen? Decreasing competition, unorganized consumers, and a big business government.

Holy Cross Instructor to Run For Congress.

John B. Anderson today announced his candidacy for the Democratic nomination for United States Congress from the 3rd District of Massachusetts.

At a press conference in Worcester, Anderson stressed the need for a more effective national government. Citing the failure of the Federal Government in dealing with the energy crisis, inflation, and shortages of essentials, Anderson called for "a renewal of government" and its "rededication to the effective service of the people."

Contending that Congress as much as the President had failed to respond to the people's needs, Anderson asserted Congress needed "new ideas, new blood, and a new enthusiasm for America and

Congress, he said, must have representatives who are "vigorous champions of the people they

Asserting "deep faith in America," Anderson said, "we Americans have the talent and the ability to meet this day's problems

as we have met and mastered yesterday's.'

In his campaign, Anderson intends to walk through all the towns in the district "listening to the people." Expressing a hope for wide participation in his campaign, Anderson said he would listen to everyone and was confident everyone would give him a fair hearing.

Anderson, 39, is a Worcester native. He was educated in Worcester public schools. He graduated from Holy Cross College in 1957 and did graduate study at the University of Notre Dame. Since 1961, he has been a member of the Holy Cross faculty.

Active in politics, he was the Central Massachusetts Coordinator of the Democratic presidential campaign in 1972. He is a member of many civic and professional organizations. He has been a regular participant on "Worcester Labor Today" on WICN-FM and the editorialist on "Can Worcester Change?" on WSMW-TV (Channel 27) Worcester. He lives at 3 Freeland Street, Worcester.

WPI - Holy Cross Program

WORCESTER, MASS. - Holy Cross College and Worcester Polytechnic Institute have established a cooperative program in which students at either institution can earn two degrees, a bachelor of arts and a bachelor of science, in five years.

The announcement was made jointly by the Rev. John E. Brooks, S. J., Holy Cross President, and Dr. George W. Hazzard, WPI President.

Known as the 3-2 plan, it provides for the fulfillment of all the usual degree requirements at both institutions through cooperative planning of the students' academic programs. Students participating in it will be eligible to major in any of the Holy Cross and WPI academic programs.

Dean William R. Grogan of WPI said that the program, while not involving anticipated large numbers of students, offers several

advantages to students. For example, a Holy Cross student who majors in history but decides to work also for a degree in civil engineering because of an interest in urban planning, could complete his first three years at Holy Cross with a few basic engineering courses at WPI. At the end of his fourth college year, which would be spent at WPI, he will have met Cross degree the Holy requirements for a B. A. After another year of engineering studies at WPI, he will have met all the requirements for a B. S. degree at WPI. The program would similarly meet the needs of WPI students interested in studies at Holy Cross.

The Rev. Paul Harman, S. J., associate dean at Holy Cross, said the program will be implemented for classes entering both institutions in 1974.

Household Energy Crisis Solved

WORCESTER, Mass. - A home self-sufficient in energy is the goal of a research team from three Worcester colleges, Clark University, Holv Cross College and Worcester Polytechnic Institute.

The research team envisions a home in which a methane gas generator will provide gas for cooking and heat, a windmill for minimum electrical needs and solar panels for heating. In all but the coldest weather, they feel that such a home could provide all normal energy needs.

Heading the research efforts are Dr. B.T. Lingappa, a bio-chemist from Holy Cross, Dr. Michael McClintock, a physicist from Clark, and Dr. Joseph Kohler, a chemical engineer from WPI. About 10 undergraduate and graduate students are working with them on the project.

The primary energy source will be the methane gas generator in which solid waste from the home, supplemented by materials containing cellulose will be acted upon by bacteria in the absence of oxygen, creating the methane gas. This is a technique already used in India, Dr. Lingappa's native country, where his relatives have been using the technique for more than 20 years without any maintenance or repair cost or expense for raw materials. He is developing a small laboratory scale confermenter tinuous type modeled along that already in use in India and is isolating strains of anaerobic bateria best suited to enhancing the fermentation process. The gas generator will not only act on solid household sanitary waste but also on garbage, leaves, grass clippings and

Part of the research is concerned with determining the range of temperatures, size of reactor, and the effects of pollutants in the form of household chemicals. An analysis of the residue for chemicals which may have salvage value is also part of the

Kohler's group will work on designing the gas generating equipment to determine the optimum shape and size. They'll also study the effects of heating and stirring in the reactor. Part of their project will be to minimize the residue and the time of reaction to develop the greatest yield of methane. Perhaps the most important contribution of this group will be the development of an automatic control system which will require minimum attention from the homeowner.

McClintock's group at Clark is building a small demonostration methane gas generator which will serve to demonstrate the potential of the process as a means of interesting additional research teams in the process. They are also developing the means of integrating the energy from the methane gas with other energy created by windmills and solar

nead

En

ettle

erin

ACI

ende

n an

Mille

et ne

Divisi

Memo

He

abor ect wi ower

Che olum

netal

Iniver

Combu

956 W

f met

He h

Argoni

Massa

echno

Funding for the part of the project that deals with the feasibility of generating methane gas from common household solid wastes is financed by money from the Mellon Foundation. Foundation awarded \$75,000 last year to WPI, Clark, Holy Cross and the University of Massachusetts Medical School to stimulate intercollege cooperative projects.

The three research men feel that one of the greatest benefits from the project will be the creation of a joint research project among students from the three participating colleges. Resources and expertise from the three institutions are available to the entire team. Although students will work primarily on their own campuses, the entire team will meet regularly in seminars to discuss progress and to plan the next steps in the research.

COMPUTER SCIENCE .

UNPRECEDENTED WORK . . . UNPARALLELED OPPORTUNITY . . .

CAREERS AT THE NATIONAL SECURITY AGEN

tional Security Agency's mission, we can offer job challenge and career opportunities that are impossible to match.

AT NSA, we are responsible for designing and developing secure/invulnerable communications and EDP systems to transmit, receive and analyze much of our nation's most vital information. The advancing technologies applied in this work are such that they will frequently take you beyond the known and accepted boundaries of knowledge, Consequently, your imagination and resourcefulness are essential qualifications for success.

The Career Scene at NSA: Engineers will find work which is performed nowhere else . . . devices and systems are constantly being developed which are the most advanced in the Western World. As an Agency engineer, you will carry out research, design, development, testing and evaluation of sophisticated, largescale cryptocommunication and EDP systems. You may also participate in related studies of electromagnetic propagation, upper atmosphere phenomena, and solid state devices using the latest equipment for advanced research within NSA's fully instrumented laboratories.

Mathematicians define, formulate and solve complex communications-related problems. Statistical mathematics, matrix algebra, and combinatorial analysis are but a few of the tools applied by Agency mathematicians. Opportunities for contributions in computer sciences and theoretical research are also

Computer Scientists participate in systems analysis and systems programming related to advanced scientific and operational applications. Software design and development is included, as well as support in hardware design, development and modification.

Starting salaries are based on education and experience, and increase as you assume additional responsibility. Further, you will enjoy the varied career benefits and other advantages of Federal employment without the necessity of Civil Service certification.

Check with your Placement Office for further information about NSA, or write to: Chief, College Relations Branch, National Security Agency, Ft. George G. Meade, Md. 20755, Attn: M321. An equal opportunity employer, M/F. NATIONAL SECURITY AGENCY Our representative will be on campus

February 11, 1974

WHERE IMAGINATION IS THE **ESSENTIAL QUALIFICATION**

Applications for the program will be reviewed by the admissions offices at the two institutions. The close proximity of Holy Cross and WPI is seen by officials at the two schools as an added convenience for students interested in the cooperative arrangement. Students at both schools now ride busses shuttling among colleges

and universities comprising the Worcester Consortium for Higher Education.

new cooperative The arrangement grew out of studies made with the aid of a \$75,000 grant from the Andrew W. Mellon Foundation of New York City to help local educational institutions with joint planning.

Please

Help —

Give Blood!!

Polyter ow se netalli This eries (

SPE

Yes,

mpile ighligh ovies ne vot Catch dyss

Slau arry' Vanted ere / Fritz Strav nowle

Out dysse Woods ere in ote g

traigh

For t e sur

Intersession: The Pub

ation

will

ntial

f in-

arch

also

in-

the

ergy

solar

the

hane

solid

from

The

last

and

setts

that

from

of a

long

par-

and

in-

the

will

own

will

s to

the

an Intersession evening, one felt sthough WPI were deserted, cold dempty, as if lacking any heart. aly a few scattered lights shown the windows of the dorms; all e other buildings were dark and reboding. A few people wandered out, but most seemed to be ading for Riley.

Entering Riley and descending stairs, the musty, stale air of darkened Daniels Commons ttled upon the senses. But enring the Pub, the light increased a soft hue and the air thick with e odor of spilt beer and cooking

Across the room, three barders were busy pouring beers, an attempt to keep everyone ell sloshed with glasses of Bud, ller and Michelob. Everywhere, ups of friends were talking, ighing or just becoming obxious. Others, like a group from e fraternity, were attempting to new records for the numbers of

beers consumed at one sitting. The Walking across the quadrangle juke box poured choice examples of the drunken Techies' musical tastes into the smoky air and contributed to a relaxed atmosphere seldom found at WPI during the regular terms.

For the decreasing percentage of WPI students who elected to attend Intersession this year, the nightly diversions planned by the Special Committee and Office of Student Affairs proved interesting, but once again fell somehow short of the mark. However, the Pub proved a welcome addition to the Intersession scenes.

Regardless of other campus activities, the Pub drew a good crowd each evening. On the nights when no planned activities were scheduled, the Pub's beer drinkers converged on the basement of Riley in boisterous droves. Freed from academic pressures, trips to the Pub proved a particularly

Conquering Inner

Space

ecturer Coming

WORCESTER, MASS. - Warren Chernock, director of the clear Laboratories, Combustion vision, Combustion Engineering, Windsor, Conn., will deliver Carl Gunnard Johnson emorial Lecture, Tuesday, Feb. Worcester Polytechnic

will speak in Higgins boratory at 4:30 p.m. His subet will be "Materials for Nuclear

Chernock is a graduate of lumbia University and received master of science degree in tallurgy from New York iversity. He has been with mbustion Engineering Inc. since when he was named manager metallurgy.

He has been associated with the gonne National Laboratory and assachusetts Institute chnology as well as the Hartford aduate Center of Rensselaer lytechnic Institute, where he is serving as chairman of the tallurgy department.

This will be the seventh in a ries of lectures given annually to by John Aubin

Gripping the hostile world, clawing fingers till they meld with the earth. He looks down as the ground looks up and fear clutches his throat, his chest, and paralyzes his searching hand; stretching, straining (reason refusing, passion insisting). His spine gives a quarter of an inch, and his fingers drive home to a solid crevice. Looking down from his lofty perch passion throws back his head and he laughs at the impotent height, confident that reason has the crevice and won't dare let go.

Rock climbing is only one of the real thrills available to the Outing Club member. Whether it's climbing sheer rock, racing down a cascading stream, or snowshoeing on light-foot powder at 4,000 ft. the WPI Outing Club can get you there and back. The Outing Club is a

honor the late Carl Gunnard Johnson, WPI faculty member for 45 years until his death in May, 1966. He was the John Woodman Higgins Professor of Mechanical Engineering.

the reel thing

SPECIAL ANNOUNCEMENT:

February 7-9, Holy Cross, Clark, and WPI present director William Friedkin. "The Boys in the Band" and "The French Connection" will be shown in Alden. Check your WPI Activity calendar for further details!!

Yes, the Lens & Lights survey is mpiled. There is a detailed result et, but I will just give the hlights of the survey due to ce and time limitations.

In the movie category, the wies that had over 25 percent of vote, in order of most votes e: "Clockwork Orange", Catch-22", "2001: A Space dyssey", "M+A+S+H", dyssey'', 'M+A+S+H'', Slaughterhouse-5'', 'Dirty arry", "Everything You Always anted to Know About Sex But ere Afraid to Ask", "Airport",
Pritz the Cat", "Woodstock",
Straw Dogs", "Carnal nowledge", "Fail Safe", and he Gang That Couldn't Shoot traight".

Out of these, "2001: A Space dyssey", "M+A+S+H", and Woodstock" have all been shown ere in the past 3 years. The low le getter was "In Seconds" ich got no votes.

For the questions on the back of survey, it was close to a 50-50

split on the old comedy issue, with those that were interested in seeing the old comedies only slightly outweighing those that were not interested. But over 50 percent of the people polled said they would come to see x-rated movies on campus, and over 75 percent of the people said they would come to "Clockwork Orange."

In the cartoon category, the old standbys Roadrunner (with over 50 percent of the vote), Pink Panther (with over 25 percent of the vote) and Bugs Bunny were the most popular, although almost every other cartoon character was mentioned in the poll.

I:, the comment category, the most popular request was for more movies, and there seemed to be a fraction of the population who were interested in the karate kung-fu type movies. There were also comments about the sound, showing movies in the wedge, and Clint Eastwood.

Next week, the action taken as a result of the survey.

Airborne School

On January 24, 1974, WPI R.O.T.C. cadets Christopher M. Ford, David J. Hill Jr., Eric E. Paulson, Bruce P. Wright, and John G. Yamashita graduated from the United States Army Airborne School at Fort Benning. Georgia. They, and 2nd lieutenants Richard F. Brontoli, '73, and Russell E. Smith, '73, were part of Airborne class number 24 from 44 Company, 4 Student Battalion. T.S.B., which conducted training between January 4 and January 23.

These cadets join Robert W Flanagan, Lawrence R. Hayden. Carl J. Johnson, Jeffrey H. Moody and Michael L. Parker as members of the airborne.

John G. Yamashita

enjoyable and relaxing diversion, one that we might do well to experience more often.

relatively new club on campus, but it is rapidly growing. Started two years ago, through the energies of Steve Fitzhugh '75, Garret Cavanaugh '75, and Professors Wagner and Stevenson, it now boasts a dues-paying membership of 35 and its trips have taken about 100 more techies to various "attractions" in New England. In addition the club is accumulating back-packing, hiking, mountain climbing, canoeing, kayaking, and rock climbing equipment for use by members and friends.

The Club is affiliated with the Intercollegiate Outing Clubs of America, and the Worcester chapter of the Appalachian Mountain Club, and joint trips are scheduled with organizations.

The Outing Club may well be the most active club on campus. Nearly every weekend this year, Outing Clubbers have found themselves out of doors, in the mountains, rivers or caves of New England. It has been involved in two rescues and numerous "first ascents" of various routes and mountains. The Club also provides teachers for four Intersession Courses, and runs a productive Winter Climbing School.

Our meetings and trips are open to anyone who wants to come along. Watch for our next meeting time and place. "Americans on Everest" - a full color movie of the first American Expedition to Mount Everest will be shown. You are further invited to participate in any of our trips, we invite you to see how much you can do, we suspect you will be pleasantly

Catch - 22

by Bob Bradley

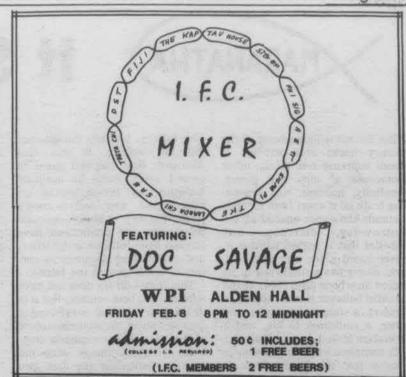
. Ask him if I'm crazy ... We can dance, but I won't let you sleep with me... You don't want to sleep with me?... We really made it!..." These may sound familiar, but don't be fooled by it's sound, it

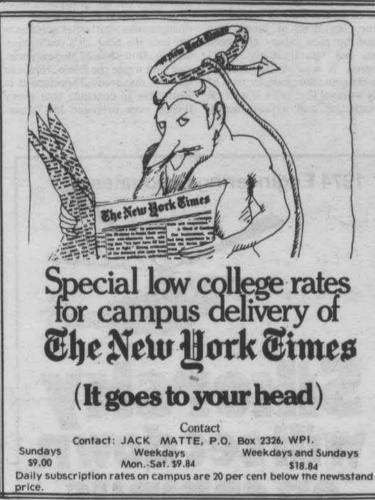
Catch - 22

And that in essence is Catch-22. Mike Nichols adaptation of Joseph Heller's novel Catch-22 is perhaps the most appropriate film to show on registration day. Trying to follow the sequence of events is like trying to register when they've lost your schedule. The film (like this review) starts at the end and then continues outward from the

Whiteout to Snowden dying, Yossarian finding wound on Snowdens's leg.

Richard Benjamin as Major Danby is great, he has the right attitude towards his character. Bob Newhart as Major Major and Orson Welles as General Dreedle made it seem that they were the only ones capable of playing their respective parts.





may make sense. Yossarian thinks so, and all his buddies lost somewhere in the Mediterranean in that side-splitting comedy Catch-22. (A little pun for those who saw the flick). My review on this film is vague for two reasons. I can't excuse my visit to the pub before the show, but those seats (whose the wise guy who sawed off all the legs on the chairs?) causing me constant bobbing between the heads of the towering 4'9" giants that sat in front of me - Oh well?!

The basic film was OK - with some laughs, the baffling dialogues of the characters trying to escape the madness of flying bomber missions is the olympics of verbal volleyball in anyone's language. From what little I saw (between my seating and the projectionist's eye problem - not much!) all the gory details were accented from

by Bruce D'Ambrosio Len Goldberg

Whiteout to Snowden dying, Yossarian fixing wound on Snowden's leg.

The cast is a collection of the good talent and the big names around at that time, such as Art Garfunkel, Paula Prentiss, and of course Alan Arkin as Yossarian, the only sane person in a crazy world (or is it the other way around?).

Whiteout to Snowden dying, Yossarian fixing wound on Snowden's leg.

Added to the all-star cast was the director Mike Nichols, one of the better known directors in Hollywood today. His influence on the film is obvious, in the use of contrasting dark backgrounds and light backgrounds, yet always keeping the background inthe book (which I read) to the screen to add to the "plot"

This is going to be short (wish the movie was!) Since I was let down I enjoyed the book more; perhaps leaving something to one's imagination sometimes makes it better.

But think of it, here's a place where these "trained" men come to do their best in a common effort, yet every time they want to leave, they change the requirements and they must stay longer to get shot down and put up with each other's psychosis (who said Milo was the head of Management Engineering?) for ever and ever. And because they want out, that is the very reason to keep them in how ridiculous, it could never happen... (... here at WPI, we have a Plan...).

significant and unsure. Use of whiteouts, as opposed to blackouts, becomes pronounced as the film progresses. When one is adapting a novel that has no order to it for the silver screen, a good director is a

must and Nichols fulfills that role. Whiteout to Snowden dying, Yossarian fixing wound on Snowden's leg.

Catch-22 is about confusion as it applies to war and war as it causes confusion. The characters really believe they are sane, yet from our viewpoint, we can see the fallacies they are laboring under.

Whiteout to Snowden dying, Yossarian finding wound in Snowden's chest too late to save

To us and them, the only thing that makes any sense is that nothing makes any sense. And that in essence is Catch-22.



It Stands

The Bible is unique among all the literary works ever written. It stands supreme over all the other documents of men. Its power, simplicity, holiness, and resounding truth set it apart from all else. It stands like a rock against all the controversy, defiance, and disbelief that is hurled against it. Never has it given way under attack. Never has a single one of its sacred lines been disproved. To the thankful believer it is a support, a comfort, a source of strength and cheer, a guidebook to life, and a revelation of God. I can say all this with complete confidence because I know that this grand Book is thoroughly and absolutely the very Word of God.

True, the Book of books was penned by men, many of whom were not particularly well educated. It was written over a span of some 1500 years by men of many walks of life. Yet it is without contradiction and without scientific fallacy, because though men did the writing, it was God Almighty that inspired them to record every word. Its accurate histories are invaluable to archaeologists who search man's past history. Many of its prophecies and predictions have already been fulfilled to the letter, and every other prophecy is certain of fulfillment in the future.

This Holy Library does not have a' lot to say about science. But it is thrilling to find that everything it does say about the physical nature of the universe is completely true. Many of these things were not verified until just the last two centuries, but the controlling hand of God never allowed any disagreement with true science to get into His book. It's really very simple. God created the universe, and God wrote the Bible. How can the two disagree? Therefore it is justifiable to conclude that every theory ever proposed by "scien-

tific" people that disagrees with the Bible must be false.

If you would find real happiness, joy, and peace, if you long for a life of fulfillment and usefulness, if you desire to be truly great, then live the Bible. Read it carefully, and prayerfully. Learn to love it, and painstakingly practice every word recorded on its Divine pages. For, to quote Robert Chapman's "Tribute to the Bible,"

This Book...involves the highest responsibility, Will reward the greatest labor, And condemns all who trifle

with its sacred contents.

Brian Plummer.

UNICOM 2025R

Regular Price

Price with Adapter

\$249.00

Student Price

\$195.00

Royal Typewriter Electric 1200

List

\$149.95

STUDENT PRICE

Roland Office Supplies

54 CHANDLER ST. 791-6551 791-6552



1974 Engineering Graduates



Sikorsky will set down on campus

February 5, 1974

And your career can take off with us, if you're the kind of bright, talented person we seek for our long-term programs to advance VTOL technology.

Our on-going commercial and military programs offer a wide range of positions 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) as well as MANU-FACTURING ENGINEERING (planning, methods, processes).

With us, you'll find professional stimulation and growth opportunity along with ideal countryside living off Long Island Sound in picturesque Stratford, Connecticut, home of the Shakespeare Festival. You'll also enjoy highly competitive starting salaries and an outstanding benefits package.

Arrange a convenient interview through your Placement Office now.

Sikorsky U DIVISION OF UNITED AIRCRAFT CORP **Aircraft**



An Equal Opportunity Employer (m/f) __

may offer RX via overseas training

For the session starting Fall, 1974, Euromed will assist qualified American students in gaining admission to recognized overseas medical schools.

And that's just the beginning.

Since the language barrier constitutes the preponderate difficulty in succeeding at a foreign school, the Euromed program also includes an intensive 12 week medical and conversational language course, mandatory for all students. Five hours daily, 5 days per week (12-16 weeks) the course is given in the country where the student will attend medical school.

In addition, Euromed provides stu-dents with a 12 week intensive cultural orientation program, with American students now studying medicine in that particular country serving

Senior or graduate students currently enrolled in an American university are eligible to participate in the Euromed program.

For application and further information, phone toll free, (800) 645-1234

or write,

Euromed, Lta.

170 Old Country Road Mineola, N.Y. 11501



FREE CLASSIFIEDS

Newspeak Classifieds P.O. Box 2472

MARANTZ-EPI GIVE-A-WAY! A Marantz 1060 Integrated Amplifier 60 Watts rms, and two EPI 150 Speakers. This equipment is only two weeks old! Warranty cards haven't been sent in yet. Three years parts and labor on Amp, and five years on Speakers. Fair traded list price is \$229.95 (1060) and \$278 (EPI) - \$507.95. Will sell together \$369.00! Separately \$179. (1060) or \$99 ea. (EPI). MUST SELL. Contact Bruce, 753-0644. Anytime.

CALCULATOR FOR SALE: \$35. Unisonic calculator, like new, pocket size, with case, 6-volt, battery operated. Functions: ADD, SUBTRACT, MULTIPLY & DIVIDE. (List Price \$70.) Must Sell. Call "Doc" Corey, Higgins House, 757-0423 or drop a note in Box 451.

FOR SALE: Mercedes 1966, model 230, air cond., automatic, power steering and brakes, AM-FM, 2 mpg, \$1275. L. Fox, 754-6829.

NOTE: It has become increasingly difficult for the typists NEWSPEAK to read many of th articles that are to be placed into the newspaper. It would be greatly appreciated if some of you wou spend a few more minutes to make it readable. Thank you.

ROOMS FOR RENT: at Schussler Rd. (in back of Riley, near Highland St.) Call Mrs. Smith at 757-7938. Call after 5:00 p.m.

Harriet Katz to Sing

The Mini-Spectrum program continues during C Term with the recital of Harriett Katz, soloist.

Harriett Katz's musical training includes voice study with Mr. Thomas Claney of New Haven, Conn., Mrs. Mary Collier of the University of Conn. Music Department, Mrs. Dorothy Stahl of the Smith College Music Department, and most recently with Mrs. Susan Clickner of the New England Conservatory of Music and the Clark University Music Department.

With vocal experience both in popular and classical music, Harriet has performed in upstate New York resort areas and has sung with both the University of

and the Springfield, Connecticut Chorus Massachusetts Chorus.

Harriett is now singing regularly in Worcester community musical theatre productions and as I

member of the Temple Emanuel Festival Choir. Harriett performed in the 1971 New England Theatre Festival at Brandeis University portraying ning the role of Lucy in Gion-Carlos Minotti's mini opera. "The Telephone."

Her program will include pieces by Henry Purcell. Franz Schubert, and Rogers and Hammerstein as well as five Hebrew Folk Songs.

durir Misc very Farr and a agair

and

Satur

unint

made never rebou breal Holid for C 91. W defen beas

time. the so

for P offen tourn be th Allen in wi victor back

narro point: game selec Tech

rema

game

Albin

The three starti total Thet

Willia The for th with was

by p

lbs.) Schli (190

decis

Sports Highlights

Engineers Reach .500 Mark

The WPI Basketball team leveled its seasonal record at seven wins and seven losses by defeating an inexperienced Amherst team on Saturday. WPI rallied from an 11-8 deficit in the early going to run off an minterupted 10 point spree. Richie Allen and Kevin Mischler led the way during the first half. Allen hit his patented jump shots from all over, while Mischler hit from downtown.

Amherst seemed to be smarting from their long layoff. They played ery sloppily and committed over 20 turnovers. Senior Captain Glenn Farrell turned in a fine performance for the Lord Jeffs scoring 31 points nd collecting 13 rebounds.

Amherst hung tough throughout the game rallying time and time

Twice during the opening minutes of the second half, the visitors rallied to within one point, 37-36 and 39-38, but here Rich Turner and Allen nade their pressure known and WPI jumped to a 45-38 lead, and was never headed.

Pete Kuprinsky did a fine job off the boards, hauling down 17 ebounds. Marty Frengs capitalized on the other end of Kuprinsky's fast reak passes and collected eight assists and 11 points in the game.

In the action over intersession, WPI traveled to the Sacred Heart Holiday Classic. Here WPI picked up some of the biggest victories ever or Coach Jim Herrion. In the first round game, WPI upset Brandeis 99-1. WPI broke the game open with a potent second-half offense and tight lefense. Down in the early going, it looked as though the trip was going to e a short one. However, WPI battled back and tied the score 43-43 at halftime. Richie Allen led all scores once again. Pete Kuda, who has since left he school for personal reasons, did a fine job off the boards. He filled in or Pete Kuprinsky. Marty Frengs and Kevin Mischler added to the hot

WPI then went on to beat Alfred Coolege 73-70 to gain a berth in the burnament finals. Here the trio of Allen, Turner, and Frengs proved to e the knock-out punch. Each connected in clutch situations all night. Allen had 23 points, Turner had 18 points and 15 rebounds, Frengs chipped in with 16 points.

In the finals, St. Michael's ended WPI's upset string with a 108-86 victory. Despite being down 49-39 at half-time. WPI made a good come back in the second-half behind the hot shooting of Allen and Turner. WPI sarrowed the margin to 62-56 with 14 minutes left. Richie Allen had 30 points and Kevin Mischler collected 18 points in the losing cause.

Richie Allen, who averaged 29.3 points for the three tournament games, was named to the first all-tournament team, while Turner was selected for the second team.

In other games over intersession, WPI picked up a win over Lowell fech, and losses at AIC 96-79 and Middlebury in overtime 93-87. In these games, Richie Allen led all scorers followed by Rick Turner

WPI looks to go over the 500 mark on Thursday when it gets a ematch with Brandeis University and takes on Williams on Saturday.



Pete Kuprinsky adds his touch to the WPI offensive attack. (Steve Albino)



Rick Turner controls the tap for WPI. (Steve Albino)

POOL SCHEDULE January 29 through February

MONDAY - FRIDAY MONDAY - THURSDAY 11:30-12:30 7:30 - 9:30

SATURDAY - FAMILY SWIM SATURDAY - OPEN SWIM SUNDAY - OPEN SWIM

9:30-11:30 1:00 - 4:00 1:00 - 4:00

No Family Swim on February 2 and February 9

Swimmers Gain and Win

During Intersession the swim team came back and practiced every day with double sessions in order to get in the best possible shape for the upcoming meets in February, which proves to be the meet of its season. The team practiced even during the week in between Intersession and Term C, even though they were not fed or given money as were other teams which stayed and practiced during this time period. Two home meets were held, both against teams which are presently out of our team's class, yet valiant efforts were turned in.

On Wednesday night, January 16, the University of Connecticut travelled to WPI's "home" pool at the Lincoln Square Boy's Club, turning in a 72-40 winning performance. UConn swept 5 of the first 6 events, thus setting the trend of the evening. WPI received firsts from John Palitsch in the 200 yd butterfly, Hadji Deiters in the 100 yd freestyle, Scott Wilson in the 200 yd backstroke and Alan Hahnel in the 500 yd freestyle; WPI also took the 400 yd freestyle relay and were able to muster but two second places in the whole meet.

The next Saturday, January 19, an 8-man partial Keene State team came to another "home" meet. Al Hahnel won the 1000 yd freestyle and Scott Wilson and Bruce Smith combined to sweep the 200 yard backstroke, but all else, including boy relays, went to the talented Keene State team. WPI picked up 6 second places which kept them in the meet for awhile, but good efforts were not enough in this case.

WPI defeated Saturday, Assumption College 80-27 by winning everything except the two diving events. Alan Hahnel broke the pool and school records in the 1000 yard freestyle with an 11:24.7 clocking, breaking the school record by 19 seconds.

Basketball

With the first half over, things are starting to shape up in IM Basketball

In League A, there is a five team scramble. KAP, LCA, TKE are all 4-0, while WRC and BSU are 3-1. All were expected to be there except WRC which has been a pleasant surprise, and they could cause some rumblings in the next couple of weeks. The next ten days should tell who is strong in League A with TKE taking on BSU and WRC, LCA taking on BSU, WRC playing KAP and BSU. It should prove interesting.

In League B, there is also a five team scramble, with PGD and Cavaliers heading the field at 4-0, Gladstone 3-1, and SPE (1) and PSK 2-1. Things will be loosening up here with Cavs taking on PSK, and PSK taking on SPE. PGD and the Cavs still remain my choice to fight it out, and come February 25, both should still be undefeated.

In League C, where competition seems to be the least balanced, SAE is once again leading the pack with a 4-0 record, but this time, they have company in ATO and SP who are 4-0 and 3-0 respectively. SAE has come up with two excellent freshmen to help Larry Patty and they look stronger than last year when they made it to the finals. ATO has been somewhat of a surprise, and will give SAE a run for their money, but still, SAE looks too strong. SP has been a total shock! But they are playing good ball and will win some more games, but they will not beat ATO and SAE because they lack the inside strength to match them.

Comments:

After observing the first half, it is possible to make some observations. 1) League A could easily have three of the four top teams in all three leagues, with LCA, BSU and KAP. The other is SAE. 2) Keep your eye on BSU. They are very good and could easily be in the finals come March. 3) The most surprising teams so far have been ATO and SP. Both are stronger than expected, and should make things interesting for

This Saturday at 2 p.m. WPI hosts Nichols in our home pool. This will be the last meet here this year and the team expects to challenge several school records.

Upcoming Sports Events . . .

Thursday, February 7

Varsity & J.V. Basketball vs. Brandeis. Home, 8:00 p.m. Hockey Club vs. Fitchburg State. Away, 7:45 p.m.

Saturday, February 9 Varsity & J.V. Basketball vs. Williams. Home 8:00 p.m.

Varsity Swimming vs. Nichols. Home, 2:00 p.m. Varsity Wrestling vs. Amherst, Union. Home 1:30 p.m.

Fencing Club vs. Norwich. Home

Ski Club vs. St. Anselms

Monday, February 11 Hockey Club vs. Clark. Home 8:45 p.m.

STUDENTS FACULTY STAFF

If you are interested in learning Karate drop a note into Box 2661 or Box 2340.

Wrestlers Shut Out Holy Cross, Lose to Williams, M.I.T.

Rick Dew

1. 21

tiley.

imith

The WPI wrestling team played hree matches over the vacation, tarting off back in December with ield, otal domination over Holy Cross. he team also lost matches against

ester Williams and M.I.T. as a The team traveled to Holy Cross or their first shutout of the year, gland with every varsity wrestler winaying ling their matches. The final score pera, was WPI 44 Holy Cross 0. Winners y pins were Steve Williams (142 rcell, bs.) Eric Isbister (150 lbs.), Steve in as schlitt (158 lbs.), and Bob Winter 190 lbs.). Other winners were by lecision. They were: Steve Bar-

nicle (118 lbs.) 11-1, Larry Martiniano (126 lbs.) 6-5, Paul Wittman (134 lbs.) 8-0, Tom Pajonas (167 lbs) 12-2, Tom Chesser (177 lbs.) 5-0, and Craig Arcari (Hwt) 7-5. Shutouts like this one don't happen often and it showed a great effort by the team.

Also winning exhibition matches were Joe Costa, Pete Greco, Rick Schaufeld by pins and Jim Ferraris by decision.

The following match against Williams, the team lost a close match 25-19. Both 118 pounder, Steve Barnicle, and 134 pounder Paul Whittman tied their opponents. Steve Schlitt won a decision 7-6, and Tom Pajonas pinned his opponent at 4:44. Williams also forfeited to Larry Martiniano.

The match against M.I.T. was a different story. They are ranked fourth in New England. The only winners for WPI were Paul Whittman 16-4, and Eric Isbister by a 4-1 decision. The final score was MIT 34, WPI 7.

The teams record is now 5-6. There is a tri-meet next Saturday in Alumni against Union and Amherst.

property of the control of the contr

The diverdived by the chip of the chip of

WANTED

AT A STARTING SALARY OF \$9,600



LEADERS

MEN AND WOMEN...LEADERSHIP AND MANAGEMENT POSITIONS...EDUCATIONAL OPPORTUNITIES (SCHOLARSHIP & FINANCIAL ASSISTANCE)...
STARTING SALARIES AT \$9,600...ANY STUDENT ATTENDING COLLEGE
IN THE CENTRAL MASSACHUSETTS AREA (OR HIGH SCHOOL STUDENT
PLANNING ON COLLEGE) CAN QUALIFY FOR THESE POSITIONS...FOR
FURTHER INFORMATION WRITE OR CALL COLLECT THE PROFESSOR OF
MILITARY SCIENCE, WORCESTER POLYTECHNIC INSTITUTE, ROOM 028
HARRINGTON AUDITORIUM, WORCESTER, MA 01609...(617) 752-7209.

ARMY ROTC



NEWSPEAK

Tuesday, Feb 5, 1974 Vol. 2 No. 1



Exorcist Director at WPI, p. 6

West St. Closing, p. 1
Blood Drive Coming, p. 1
History Begins Again, p. 4
Comic Book King, p. 7