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Faith in our Future

1865-1965

WORCESTER POLYTECHNIC INSTITUTE

# The Tech News

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Number 6

## Gordon Hall Raps All Extremists—Left and Right

Gordon D. Hall of Boston, nationally known lecturer on extremism, addressed an assembly of Techmen on Thursday morning, Oct. 15. Hall, who opposes extremists on both "right" and "left", accented the importance of having opposing factions such as the conservatives and liberals, but denounced radicals as being out of the mainstream altogether.

Mr. Hall cited the John Birch Society as an example of the extreme rightist movement, who have flagrantly displayed their radical tendencies in vicious attacks on the late President Kennedy and ex-President Eisenhower.

Speaker Hall also gave a report of a large scale plan to recruit over one thousand college students to defy the State Department's travel ban to Red China, North Viet Nam, North Korea and Cuba next summer. According to him, the Student Committee for Travel to Cuba, which has already organized such trips, is behind this new and larger venture. The Committee, said Hall, is merely a front for the Progressive Labor Organization, a branch of the Communist Party.

This organization's publication, *Progressive Labor*, is, in turn, a



Gordon D. Hall

front for the extreme leftist movement, Mr. Hall alleged. He deplored the rising flood of such extreme literature on our newsstands, and in an attempt to keep such propaganda from the public, buys up as much of it as his personal finances permit. Anyone who is interested in obtaining any of this material for educational purposes may contact Gordon D. Hall, at 222 Marlboro Street, Boston, Massachusetts.

## Dr. Bernard Lovell To Be E.E. Guest Speaker

As part of this year's Centennial Celebration, the Electrical Engineering Department will present a two day seminar program with Sir Bernard Lovell as the guest speaker. During this two day program, Dr. Lovell will be a Visiting Professor on the WPI campus. As a Visiting Professor, he will actually be a member of the faculty and thus will personally come in contact with the student body and members of the faculty.

Sir Bernard Lovell, FRS, OBE, PH.D., M. Sc., is a Professor of Radio Astronomy at the University of Manchester, England, and Director of the Jodell Bank Experimental Station. A Fellow and holder of the Royal Medal of the Royal Society, he is widely respected both as an author and lecturer.

Included among his many publications are many books and articles such as "Science and Civilization", "The Exploration of Space by Radio" and "The Exploration of Outer Space" in 1962. His Reite Lectures on the BBC were published under the title, *The Individual and the Universe*, in which Dr. Lovell briefly discusses the work of great astronomers of the past, and further analyzes various theories of the origin of the universe, including the evolutionary and the continuous-creation or steady state theories.

On Monday, November 2, 1964, Dr. Lovell will meet with the E.E. seniors in the E.E. lecture hall at

10:00 A.M. At 12:00 noon, he will attend a luncheon with the faculty of the Electrical Engineering Department, in Morgan Hall. At 2:00 P.M., Dr. Lovell will hold a discussion session with the graduate students in the E.E. Library.

At 8:30 P.M., that evening, Dr. Lovell will deliver an address entitled "Civilization and the Universe" in Alden Memorial Auditorium. In the address, he will extrapolate some of the past and current achievements in science and will discuss the influence of new discoveries on theories of the structure and origins of the universe.

On Tuesday, November 3, 1964, Dr. Lovell will meet with the E.E. sophomores and juniors at 9:00 A.M. in the E.E. lecture hall. He will attend a luncheon at 12:00 noon and will follow this up with several informal campus visits. At 8:00 P.M. that evening, he will address the scientific and engineering world on "Developments in Radio Astronomy." He will discuss the research which has greatly advanced man's knowledge of his terrestrial environment and the universe, together with speculation about the direction of future effort. All Worcester Tech students and faculty are invited to attend both of these addresses.

Professor Lovell graduated from the University of Bristol in 1934 as a physics major. After carrying out research work there for his Ph.D. degree, he went to Man-

## DR. WILLY LEY TO SPEAK AT THURSDAY'S ASSEMBLY

Dr. Willy Ley, recognized as one of the world's foremost authorities on rockets and space travel, will be the speaker at the assembly, Thursday, Oct. 22. Mr. Ley is considered to be the country's leading writer on the conquest of space.

He has predicted that "we are going to have a permanent and probably extensive base on the moon long before the century draws to its end." He has also stated that Space exploration is progressing at a steadily accelerating rate and, in ten or twenty years space flight will be an almost everyday occurrence.

These prognostications are drawn from over thirty years of scientific research. Willy Ley studied at the University of Berlin, his home, and at Koenigsberg, East Prussia. Throughout his formal education he was fascinated both by all aspects of scientific fact and by the history behind scientific discoveries. A unique feature of his books is the interest in scientific history.

Willy Ley had planned a career in geology, but reading of the theories of Professor Hermann Oserth on rocketry interested him, and led him to investigations of theoretical work on rockets and space travel. His first book, *Trip Into Space* dealt with rocket ships.

He played a major role in the formation of a pioneering rocket research organization which built and launched liquid fuel rockets. Wernher Von Braun, head of

chester University as an Assistant Lecturer in 1936, where he worked on cosmic ray research. At the outbreak of World War II, he joined the airborne radar group of the Air Ministry Research Establishment which later became the Telecommunications Research Establishment of Malvern. In 1945, he returned to Manchester University as a Lecturer and by using ex-service radar equipment he began to do research in radio astronomy in a field at Jodell Bank.

In 1951, the University created a personal Chair of Radio Astronomy for him. In 1954 he was awarded the Duddell Medal of the Physical Society and was elected a Fellow of the Royal Society the following year.

In 1960, he was awarded the Royal Medal of the Royal Society, and in the New York Honours of 1961 he received a knighthood. In the same year, he received the Daniel and Florence Guggenheim International Astronautics Award, and in 1962 L'Ordre du Merite pour La Recherche et l'Invention. He has received the Honorary Degrees of Doctor of Law in the University of Edinburgh and Doctor of Science in the University of Leicester.

He is an Honorary Foreign Member of the American Academy of Arts and Sciences, of the New York Academy of Sciences, and of the Swedish Academy.



DR. WILLY LEY

N.A.S.A. Space Flight Center in Huntsville, Alabama, was introduced to rocket research by Ley.

In his position as vice-president of the original Society for Space Travel, he created a full time research staff of engineers and mechanics at a proving field on the outskirts of Berlin.

After Hitler's rise to power in 1935, Willy Ley left his native Germany for an "extended vacation" in England, and then came to the United States later that year. He became a naturalized citizen in 1944. During World War II, he served the nation as a research engineer, particularly after the initial V-2 rocket attack on London.

Ley's *The Conquest of Space*, published in 1949, has been acclaimed as being "in many respects the most fascinating account of space travel." His other works include *Exploration of Mars* written with Wernher Von Braun, *Dragons in Amber*, "Sala-

manders and other Wonders and Rockets, Missiles and Space Travel. In 1964 he completed *Watchers of the Skies*, a history of astronomy. He is a consistent contributor to many scientific and popular publications including "This Week," "Look," "Aeronautical Engineering Review" and "Coalaxy Magazine."

Willy Ley is a honorary member of the new German Rocket Society, a Fellow of the Meteorological Society, a member of the American Institute of Aeronautics, the Society of American Military Engineers, a Fellow of the British Interplanetary Society, and a member of the American Association for the Advancement of Science.

One recognition of his enormous knowledge of space travel was the demand for his appraisal of Russia's launching of the first Sputnik, when his articles appeared on the front pages of many of the nation's leading journals.

## Junior Class To Hold Hootenanny

This Saturday evening, October 24th, the Junior Class will sponsor a Hootenanny to be held in Alden Memorial. In keeping with the tradition established last year by the Class of 1965, mattresses will be put on the floor in place of the Alden chairs. Admission will be 75c per person with those competing allowed in free.

The \$30 first prize and \$15 second prize have attracted at least five groups from on and off cam-

pus up to this time. During the intermission the Take Five Quintet will play for dancing.

The announcement of the results of the Ugly Man on Campus Contest and the presentation of the award will also take place during the intermission.

The Hootenanny will be held from 7:30 to 10:00. All groups interested in playing are asked to contact either Steve Hebert, SW8-3734, or Bill Behn, PL4-0037.



# Prof. Fitzgerald-Ambitious, Quiet

Robert Fitzgerald, a relatively new teacher on the staff of the Civil Engineering Department at W.P.I., was born and brought up in Ohio. In 1949 he came to Worcester Tech and graduated from the Civil Department with the Class of '53. While at Tech he played football and was a brother in Phi Kappa Theta Fraternity. Upon his graduation, he was commissioned in the Navy and spent two years on active duty in California and Japan.

After his stretch of active service, Mr. Fitzgerald remained active in the Naval reserves. He is presently commander of the Worcester Sea Bee reserve unit; rated as one of the nation's top units this year.

Immediately upon being discharged from active duty, Mr. Fitzgerald began work for Francis Harvey Associates in Worcester as a structural designer. At this same time, he began teaching a Strength of Materials course at Worcester Junior College, arousing his in-

terest in teaching. He received his Master's Degree from W.P.I. in 1960, and is presently traveling back and forth from U. Conn., where he is working on his Doctorate. He began teaching in the Civil Engineering Department of Worcester Tech in 1963.

Being a military man, Professor Fitzgerald was questioned on his views of the R.O.T.C. program at Tech. He replied that he is a definite supporter of R.O.T.C. and that he is also in favor of the compulsory program. He feels that "if we don't have a compulsory program, that with only three hundred freshmen in the school, there may be that difficulty in a couple of years of keeping the program. At larger universities there would not be that problem, but in a small school like this, if the program becomes voluntary, it may well die."

He feels that although there is some criticism of it, R.O.T.C. does contribute something to the school. He also feels that there would be

criticism of any compulsory program, as there is criticism of even compulsory physical education, on the part of both faculty and students. It is necessary, he stated, to make a program such as R.O.T.C. compulsory in order to get people interested in it and to enable students to learn what the program is really all about.

Professor Fitzgerald is also an assistant coach of the football team, and it has been rumored that he is in line for the position of coach of the freshman football team next year. It is, he replied, a little too early to tell about that, since he isn't certain that he will have the time to devote to the job. With regards to the freshman football team, he is of the opinion that "in the long run it will help us. With a freshman team and a freshman coach, they can devote more time to a smaller group of boys, and they can get better coaching." He predicts that W.P.I. will see stronger athletic teams in a few more years, as a



PROFESSOR ROBERT FITZGERALD

direct result of the new freshman program.

When questioned about the

spirit which the football team has, he replied that he thought the team spirit was good. "They're fighting all the way through, and we're not giving up when we're behind. It's only been a few mistakes which have cost us some of the games."

On the question of school spirit in the student body, Professor Fitzgerald feels that maybe the students don't get as excited as they could, but that "engineers basically have a more serious attitude so that it's not a very emotional type of spirit but rather a more loyal, deeper, and more serious type of school spirit" which exists in Tech students.

At the conclusion of the interview, Mr. Fitzgerald stated that he was enjoying his teaching at W.P.I. very much, and that he "couldn't be happier with his job. The students in particular make teaching very enjoyable, and I have a great deal of respect for them."

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# WPI NIPS UMass; NIPPED BY C.G.A.

U. MASS.

Last Tuesday Oct. 13, the Worcester Tech soccer team traveled to the University of Massachusetts looking for its third victory. The Techmen returned with a 2-0 win over one of the biggest and roughest opponents on the team's schedule.

It was a misty afternoon. Tech was able to keep the ball under better control than the UMass team. This gave Tech the advantage at midfield and in front of their goal mouth.

Worcester's first goal was scored late in the first period. Danny Coifman set up Denis McQuillen with a fine pass, and Mc-

COAST GUARD

Last Saturday was a dark rainy day with the soccer field covered with water and mud. It was also a dark day for the Tech soccer team as they went down to defeat against the overpowering Coast Guard team by a score of 3-2.

It was a sloppy game all around with water and mud flying and several minor injuries. Worcester could have beaten this team on a dry field because Tech has the ball handlers with the control that is needed on a dry field which is almost useless on a muddy one.

Tech drew first blood late in the first period. Frosh Ed Cannon tipped the ball into the goal on a pass from wing Danny Coifman. Coast Guard was not to be out done, early in the second period they hit with a score to tie it one all. This was the way the score stood at half time.

The Tech team always seems to

Quillen drove the ball past the UMass goalie. Tech's second goal came midway in the third quarter when Gonzalo Trochez booted home his first goal in two years.

Worcester's defense played one of its finest games of the year, holding the UMass team scoreless. Kirby Holcombe again proving to be the star on defense making many timely defensive plays. Also Al Dipietro, the goalie, made several key saves which could have just as easily been goals.

This was a big win for Worcester going into the Coast Guard game. UMass had already defeated the New London team by a score of 2-1.

have a strong third period. The team got out on top once again with a goal driven home by Jim Viele midway during the period.

The Coast Guard club was again not to be out done. They scored their second goal a couple minutes after Tech's. This tied the score at two all. Within three minutes after their second goal the New London team scored the winning goal on a penalty shot.

The fourth period showed Coast Guard on top and pressing all the time, but Worcester's defense prevented any further scoring. Worcester's attack just couldn't get started in the fourth canto and finally lost the game 3-2.

Ed Cannon, Jim Viele, and Buddy Watson all suffered minor injuries during the game. They however, will all be back in the line up for the next game against Lowell Tech Saturday Oct. 25.

J.A.M.

# Tech Downs Hounds, Palulis Sets Record

The WPI cross-country team gained the second straight victory in four meets as they defeated Assumption College, 19-44, on Saturday afternoon at Assumption's home course. Leading the way for the Engineers was Freshman Cary Palulis, who broke the old course record of 22:08 set by Paul Gateley of Assumption in 1963. Palulis covered the route in the remarkable time of 21:15.

Another Freshman, Fran Barton of WPI followed Palulis across the finish line. The first Assumption runner to place was James McManus, who edged out sophomore Tom Kelley of Tech for third place. McManus and Kelley ran neck and neck right down to the wire with McManus finishing a yard in front.

Following Kelley were Dave Williamson of WPI in fifth place, Thomas Cates of Assumption in sixth, Dave Vermilya of WPI in seventh, Skip Griffin of WPI in eighth, Len Weckel of WPI in ninth, and Stan Stadnicki of Assumption in tenth.

Coach Frank Sannela was very pleased with the showing of the young and strong Tech squad. With four Freshmen and one Sophomore being the first five finishers for the Engineers, it shows that the future holds bright for the WPI cross-country team. These men have showed vast improvement since the beginning of the season. For example Freshman Barton gave his best performance of the year as he moved into Tech's number two spot for the first time. Sophomore Jack Lipsey, who has been running either second or third thus far, is out with a serious leg ailment but should return soon.

# Wesleyan Tips Tech On Muddy Gridiron

Worcester Tech added to its grid iron woes last Saturday (Oct. 17) by losing its 5th straight game of the season to the Wesleyan Cardinals by a score of 18-0. Even though the Cardinals were without 4 of their starting linemen there wasn't too much doubt as to who dominated this game as the score shows. This has so far been an especially good season for the Cardinals with 3 wins and 1 loss in 4 games but they have yet to play their toughest opponents.

The Wesleyan team had a 14-6 lead in first downs and out-gained the Engineers 256 yards to 80

yards. The Engineers had 28 yards in the air with 2 completions in fourteen attempts and 2 interceptions in the sloppy weather.

Tech's usual stubborn defense looked good in the first half in stopping the Cardinals on the 15, 5, 43, and 30 yard lines but then the Cardinals went to the air and gained 67 yards in 3 plays. The last play was a 30 yard completion from Foster to Congleton that gave Wesleyan its first score. Tech guard Carmen DellaVecchia charged in and blocked the try for the PAT to leave the score 6-0 at the end of the first half.

Wesleyan's next score came late in the third period when Al Corr burst through the middle of the line and blocked Webber's attempted punt from Tech's 10 yard line. The ball bounced into the end zone where Corr fell on it to collect another 6 points for Wesleyan. The conversion attempt was wide. This TD was especially disheartening because the Engineers had just had a pass completion called back from their 36 yard line because of an inelligible receiver downfield.

Wesleyan intercepted a Korzick pass on its own 12 yard line and marched 88 yards in 21 plays, topped off by a 2 yard scoring dive by Paul Stowe over the middle of the line. The still stubborn Tech defense foiled the attempt for the 2 point conversion.

The remaining 3 minutes of the game was a battle between the second units that ended with Tech pushing to the Wesleyan 8 yard line with a pass from Oliver to Dufour.

The Tech team played a hard fought game but showed no offensive fire, a point that Coach Pritchard will surely work on during the course of the week in preparing the Engineers for their game with Coast Guard next Saturday.

# HELMING NAMED NEW J.V. COACH

The Tech News is pleased to announce that Dave Helming will be the new J.V. basketball coach for the 1964-65 WPI squad. The change was made to release former coach Merle Norcross so that he could concentrate on other duties.

Dave received his Bachelor's Degree in Civil Engineering last year at Tech and this year he has returned for graduate work. In his first four years at WPI he competed in basketball and track and became the co-captain in both sports in his senior year.

As co-captain of last year's basketball team Dave was selected the most valuable player by the Worcester Telegram sports writers. He was a silent leader, who won the respect of all his fellow teammates for his outstanding ability and hustle.

Head basketball coach Charlie McNulty commented "I'm pleased to get a man of Helming's caliber and character. He was truly a leader on last year's team."

# ALDEN HYDRAULICS LABORATORY

Alden Hydraulic Laboratory enjoys an outstanding reputation as a practical engineering establishment for the testing of hydraulic designs. Engineering consultants for industrial concerns use the lab to check out their designs before actual construction. This is to find errors using a relatively cheap model rather than the actual structure.

The facilities include flow meters, calibration equipment, and a model basin. The model basin is the area which commands worldwide recognition. Recent projects at the lab include the Ciceroz dam in Turkey, the Keban project in Turkey, and the Kastraki Hydroelectric plant in Greece.

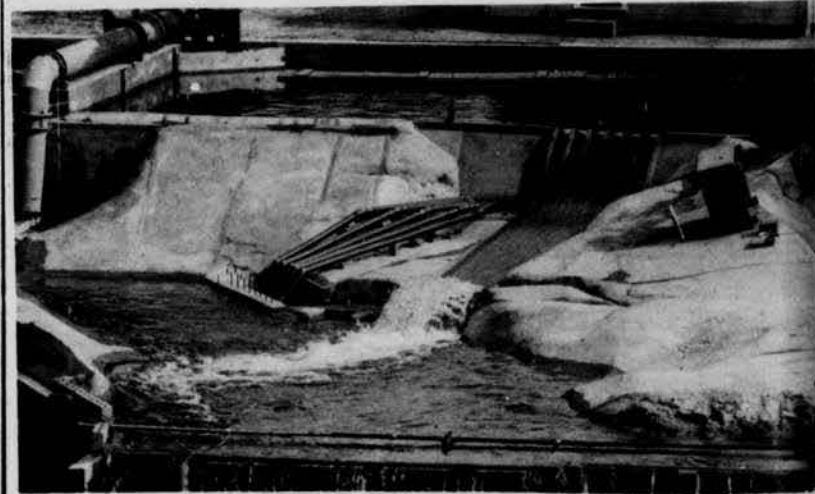
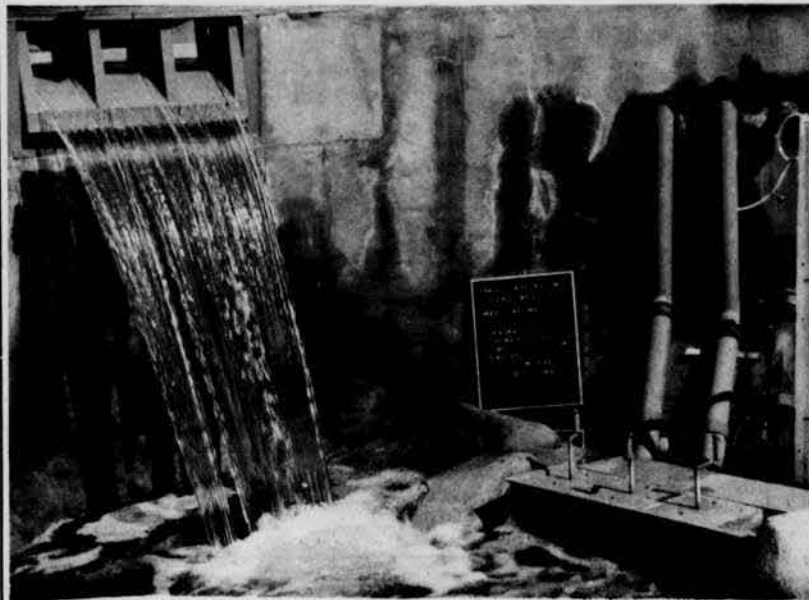
The Ciceroz project graphically illustrates the value of models in engineering. The most economical, and therefore adopted, position for the powerhouse turned out to be in an area inundated by the spillway flow. Corrective walls and splash basins have been designed to correct the situation. Using the model, other alterations can be made and tested before actual construction begins, saving much time and aggravation.

Erosion and undermining of foundations is a constant source

of trouble in hydraulic engineering. Consequences of high pressure water streams can be theorized, but the true effects, will never be known unless actual water hits actual rock in a concrete test of the situation. The Kastraki project concerns itself in these areas. The principal objective of the project is to evaluate the spillway design and its effect on downstream river beds. Simple construction with engineering cor-

rectness is the desired result on this job.

The Keban Hydroelectric Development on the Fisat River in Turkey is modeled at the lab on one to one hundred scale. The model includes a rock-fill dam, spillway, powerplant and associated topography. The problem is to design the least expensive spillway and chute that can handle all possible flood conditions. The problem is complicated



by the lack of optimum foundation conditions. Besides studying water flow, the lab personnel must evaluate the bed rock and alter their design accordingly.

These projects are just a little part of the current work load at the lab. Other projects currently at Alden include the Chong Pyong Dam in South Korea; the Chalk point power project in Maryland; Muddy Run project; and the Cornwall Manifold Study.

Crew Cuts Ivy League

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