

The Tech News

Volume 60

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Number 8

Groundbreaking Takes Place April 10

Ground will be broken for the Stoddard Residence Center at 11 a.m. on Thursday, April 10. All students and faculty are invited to attend the ceremonies which will be held at the corner of Institute and Einhorn Roads.

Speakers will include Robert W. Stoddard, a Worcester Tech Trustee for whose family the new center is being named, Pre-

sident Storke, Worcester Mayor John M. Shea, and Steven Udell.

A model of the new residence center will be on display at the ceremony so everyone can see what it will look like when completed in the Fall of 1970. Music at the ceremony will be played by the Worcester Tech Brass Choir under the direction of Professor Louis Curran.



Artist's conception of one of the three proposed student dorms in the Stoddard Residence Center.

NSF Will Sponsor Research By Zwiebel

Worcester Polytechnic Institute has received a grant of \$43,000 for a two-year period of research under direction of Dr. Imre Zwiebel of the Chemical Engineering Department on "Desorption and Adsorption with Multi-component Gas Mixtures in Non-Isothermal Beds." It is sponsored by the National Science Foundation. This is a continuation of research begun in 1966 which has practical applications in combatting air pollution by removing the pollutants at their source and also in the industrial purification of the gas mixture.

Dr. Zwiebel has been on the Worcester Tech faculty since 1964. In that year he received a National Science Foundation grant to institute a study on the behaviour of gases as they are passed through columns packed with various substances kept at a constant temperature.

Furthermore, a grant of \$20,000 from National Aeronautics and Space Administration has been received by Worcester Polytechnic Institute to continue research on "Environmental Control for Prolonged Space Voyages - Adsorption Description of Nitrogen Oxides." This work will be conducted under supervision of Dr. Imre Zwiebel.

Professor Zwiebel is a graduate of the University of Michigan and received master and doctorate degrees at Yale. He was in industry for nine years prior to coming to Worcester. He previously had done research and development work with Esso Research and Engineering Co., Linden, N.J.

He came to this country from Budapest in 1948 and was edu-

cated in New York City before graduation from University of Michigan. He was employed three years by DuPont and has held four fellowships at Yale University.

Whitcomb Develops Improved Wing

Dr. Richard Whitcomb, the man who perfected the "Coke Bottle" design for airplane fuselages, has developed a radically new wing that could greatly improve the performance of future planes, particularly airliners. Dr. Whitcomb graduated from W.P.I. in 1943, majoring in Mechanical Engineering.

Disclosure of the new design, the work of a team headed by Dr. Whitcomb, was made last month by the National Aeronautics and Space Administration. The unorthodox wing has been thoroughly tested in NASA wind tunnels and will be flight-tested in a revamped Navy jet fighter.

Agency sources said the new wing—its top side much less curved (almost flat) over the central portion than present-day wings, but more curved toward the rear—should allow airliners much like today's to fly routinely at speeds verging on the speed of sound. That speed is 660 miles an hour at jet altitude. Currently, normal cruising speeds are limited to well under 600 miles an hour because of the "sound barrier". For the airliners, the extra 100 miles an hour or so would translate into large increases in productivity

Col. Anders, Mrs. Goddard To Get Honorary Degrees at Convocation

Worcester Polytechnic Institute will honor two persons for their contributions to space science at 2 p.m. Saturday, April 12 in Harrington Auditorium, at a special convocation, which is open to the public.

Mrs. Esther C. (Kisk) Goddard of Worcester, widow of the rocket pioneer, Dr. Robert H. Goddard, W.P.I. '08, will be the first woman to receive an honorary doctor of science degree from Worcester Tech.

Lt. Col. William A. Anders, who recently completed an Apollo VIII flight around the moon, will receive an honorary doctor of engineering degree. He will speak on his personal experiences and show slides of pictures taken on the flight. The theme of the convocation will be "Man in Space".

Mrs. Goddard is an honorary alumna of Tech, Class of 1908. She has been recognized inter-

nationally for the assistance she gave her husband in his early experiments with liquid fueled rockets in Worcester and Auburn, Mass., and Roswell, New Mexico, as well as for her own efforts to increase public interest in modern rocketry and the assembly, documentation and editing of Dr. Goddard's personal and professional papers.

Mrs. Goddard attended Bates College and in 1945 was graduated from John Hopkins University. She received a master of arts from Clark University in 1951 and an honorary doctor of science degree from Nasson College, in 1961. She received a citation in 1958, from Worcester Tech for her dedication to her late husband's research for nearly 40 years, and the preservation of what has become priceless scientific memorabilia.

Colonel Anders is a graduate of the U.S. Naval Academy, who was commissioned in the U.S. Air Force. After his flying training, he served as a nuclear engineer and instructor pilot at the Air Force Weapons Laboratory, Kirtland AFB, New Mexico.

He was one of the third group of astronauts selected by NASA in October, 1963. He has since served as backup pilot for the Gemini II mission.

Colonel Anders served as lunar module pilot for the epic, six-day flight of Apollo VIII, man's maiden voyage to the moon, last December. Anders and fellow crew members Frank Borman (space commander) and James A. Lovell Jr. (command module pilot) piloted their spacecraft some 223,000 miles.

Colonel Anders currently is assigned as the backup command module pilot for the forthcoming Apollo XI mission.

At the ceremonies April 12, there will be music by the Worcester Intercollegiate Symphonic Band, Bishop Bernard J. Flanagan will deliver the invocation and benediction.

This is Colonel Anders' second visit to Worcester Tech. He was a Centennial Year speaker in 1966.

I.F.C. Outlines Spring Weekend Schedule

The Intrafraternity Council Meeting of Tuesday, March 25, was highlighted by two major reports.

The first report was by Steve Udell, Chairman of Junior Prom Weekend. He described the schedule and planned events that are to take place during the upcoming Spring Weekend, April 18, 19, 20.

Friday night is to consist of a concert which is to be held in a night-club setting in Harrington Auditorium. It will be semiformal to cut down expenses. Entertainment will be provided by the "Brooklyn Bridge" and folk guitarist Josh White, Jr. The entertainment is booked until 12:30 a.m.

Saturday morning at 11:00 a.m. is the time that is set aside

for the traditional Chariot Race. The title of this year's race will be "Snoopy vs. The Red Baron Air Duel", keeping in step with the theme of the weekend, "A Weekend With Charlie Brown". The race will start and finish in front of Harrington Auditorium. Trophies will be awarded for best time - fastest plane to run the course, and for best design. The rules for the race are as follows: 1) plane cannot be powered by any means other than manpower, and is limited to six men; 2) plane cannot be a flying model, must remain on ground 3) the plane must have a pilot, who shall remain in the plane throughout the course; 4) all entries are to compete in both categories.

Laura Nyro and Herbie Mann have been booked for a late night concert which is to begin at 10:00 and continue until 12:15 a.m.

Steve estimates that the total cost of the weekend would be ten dollars per person. He said that the deal with the circus to perform on Saturday afternoon seemed doubtful because of the time of the year.

Steve Katz then reported on the rush committee and gave the tentative schedule for next year's rushing. There was some discussion and revision and the schedule now stands as follows: Sunday, Sept. 14- Tour, 7-10 p.m.

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Steve Katz presents proposed rush program for fall 1969.

The classic wing is curved on top and more or less flat on the bottom. The air flowing across the top is accelerated to higher

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The Tech News

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Editorial

Planning Report

The President's Planning Group has placed extensive time and energy into the production of their preliminary report. They have analyzed all phases of Worcester Tech as they presently exist, and have proposed twelve different objectives which the college should seriously consider, emphasizing that we must have definite goals in mind when deciding issues pertaining to curricula, student life, and administrative, faculty and student responsibilities. Our college can no longer move blindly (if, indeed, it does not remain static) in the academic world.

Students will have an opportunity to express their views on April 16, Planning Day, when classes will be cancelled as an open invitation for student participation. The Planning Report states, "Obviously, the number of people involved with planning will have to be increased markedly to insure the success of the proposed schedule." And since, under criteria for evaluation of the twelve possible objectives, the report lists as number one, "Relevance to the needs of the student", student views and ideas will be sincerely considered.

Equally reassuring, under the proposed schedule for 1 September, 1969 to 1 March, 1970, the first order of business is to enlarge the planning group to include students. After the preliminary groundwork of exploring the possible objectives and evaluating them according to the relevance to the needs of the student and the society, compatibility with WPI resources: present and possible, and interaction with other colleges, has been completed, responsible students will sit on the committee to present the student point of view.

The Planning Group should be completely supported by Worcester Polytechnic Institute. They have been charged with analyzing Tech as it really exists, its strengths and its weaknesses. While they might have understandably been reluctant to sincerely pursue this objective, the Group has put forth countless hours of research, study, discussion, and composition of their initial report. They have realized the possible consequences of publishing such criticism, yet they recognized the urgency of the present situation. And they have succeeded in "telling it like it is".

Student support and participation must undoubtedly follow. For what purpose does Worcester Tech exist, but to educate students? The student who is not involved in his college will be swept under by the students who are interested in where their college is going.

B. H.

GROK!

by
GLENN WHITE

At Last One Died Naturally

Last Sunday I was at my grandparents watching Eisenhower's body being transferred from the National Cathedral to the Rotunda of the Capitol. My grandmother commented, "He was my favorite president. The great tragedy is, there is no one to take his place." While I have my own ideas on Eisenhower's performance as president, her remark did point out the great lack of leaders today who truly inspire the people. In an age where the word crisis has become meaningless because of its constant use, only Edward Kennedy seems to be capable of arousing a widespread sentiment and even his popularity seems to be based mostly on his last name.

Part of the reason for this is the post-election blahs. After a hectic, violent campaign finally dominated by two men who no one really cared about, the new president is being given a hundred day free trial before everyone jumps on him, the old candidates have disappeared, and the new candidates are still emerging. Another reason is that the people are beginning to realize that they don't really choose the president, that they merely give advice to the electoral college in picking the lesser of two evils put up by party bosses. Consider the number of primaries that Hubert Humphrey entered. Examine how and why Spiro Agnew was chosen. But perhaps still another reason is that we have simply killed off our leaders.

A nation (and it is the shortcomings and environment and passions of a nation that produces the sick mind of an assassin and is therefore to blame for the assassination) which kills such leaders and potential leaders as John and Bobby Kennedy, Malcolm X, and Martin Luther King, will have an unfillable gap in its leadership. The idealism that John Kennedy awoke in young people is a quality that no present leader seems to arouse. Bobby seemed and seems even more so today to be the only one who could step across the barrier between the Washington bureaucrats and the poor. One wonders where he would have gone first as president — to Europe or to the homes of the hungry in America.

The greatest problem this country faces is of course the race problem, which has been mounting for 350 years. One of the greatest obstacles to the progress of the black man is the lack of unity between the black movements. No present-day black leader seems to be able to even reach the masses, let alone unite them. Perhaps Malcolm X, rising from the ghetto himself, was the only black man who could have turned the smoldering anger of the ghetto dweller into constructive channels. Martin Luther King may well have been whitey's

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The Liberal View

by Paul Cleary

Plan for April 16 "Carpe Diem"

Wednesday, April 16, has been designated by the President's Planning Committee as the first of at least two "planning days". It will be a day without classes, thus enabling all interested students to participate in the proceedings. This day offers the student of this college an opportunity which is indeed rare in the academic world today. On this day, students will be able to hear what changes in Worcester Tech are being considered by the Planning Group and students will be able to make suggestions of their own as to what direction Tech should take in the future. This opportunity should not be taken lightly. For a campus on which students and faculty members have very little to say about most school policies, and, for that matter, very little power, at all, this day offers a chance for these two groups to make themselves heard as loudly as they wish. Any student or faculty member who has definite ideas as to what changes he feels are necessary to this academic community, has a responsibility to attend the discussions on Planning Day and offer his proposals.

One such proposal which I personally feel must be made concerns the decision making within this institution. Now is the time for the organization of the Board of Trustees to be expanded to include students and faculty members. For too long these two groups have suffered from a lack of voice and a lack of administrative power in the policies of this college. Already, other colleges and universities have added representatives of these two camps to their Boards, thereby putting an end to the "second class citizenship" to which the members of these groups have been relegated. Ideally, this change would be as drastic as doubling the present size of the Board with all new members chosen from the ranks of the faculty and students. One argument which has previously been used to combat this idea is that the work load which each trustee carries is too much for a student or faculty member to bear along with his academic load. Our trustees, however, manage to carry this work load and also that of family men and business men. Also, with a larger Board the work load per man would be reduced (applied mathematical principles). The fact is, that the two bodies which are most directly concerned with this college are the faculty and the student body. Why aren't these groups represented in the decision-making organization of this school? Why doesn't the faculty assert itself and seek increased power in this realm? Gentlemen, Worcester Tech is undergoing a revolution. The students are behind you. Carpe Diem!

Letters...

Maine Woman
Applauds
Food Drive

To the Editor

This newspaper clipping is from today's paper. It renewed my faith in young people and gave me a lift for the whole day. Thank God, and you, sir, for these kinds of students.

Sincerely,
Mrs. Arthur Chapman

Editor's Note: This is typical of several letters received by President Storke from people who read the Associated Press story about the March 27 "Food Protest".

IFC

(Continued from Page 1)

- Monday, Sept. 15- Tour, 7-10 p.m.
- Wed., Sept. 17- Tour, 7-10 p.m.
- Friday, Sept. 19- Tour, 7-10 p.m.
- Tuesday, Sept. 23- 12:00 noon, Fraternities give lists for first rush; 4:00 p.m. Lists given to Freshmen
- Wed., Sept. 24- 4:00 a.m., Freshmen give lists back to coordinator; 5:00 a.m. Meat Market
- Friday, Sept. 26- First rush, 7-9 p.m.
- Sunday, Sept. 28- Rushes 1-3 a.m. 7-9 p.m.
- Friday, Oct. 3- Rush 7-9p.m.
- Sunday, Oct. 5- Rush 1-3, Open House 7-10 p.m.
- Monday, Oct. 6- Open House, 7-10 p.m.
- Friday, Oct. 10- Freshmen sign-up
- Sat., Oct. 11- 1:00 p.m., Pledging.

Rushing on campus: Monday-Friday 7:00 a.m. -6:00 p.m.

The rules for the rushing period are as follows: 1) Tours are 25 minutes long, and are mandatory 2) Rushes are two hours long 3) For Open House, any frosh may visit any house for as long as he wishes 4) Bids are formal and written, in which the freshman signs and gives to the coordinator. This bid is signed by the frosh is binding on the house but not on the frosh. 5) Bids may be given no earlier than Sept. 26. 6) Freshmen sign up for first rush (min 3- max 6) on Sept. 24 at 4:00 p.m. from lists given by fraternities. Other rules will be given out later.

Katz stated that there would be an open meeting Monday, April 14 in the Gordon Library, second floor. The purpose of the meeting is for everyone who has a complaint or suggestion on rushing to have an opportunity to speak with the rush committee.

Suggestions can also be addressed to Steve Katz and placed in the K-box in Boynton Hall.

Student Comments
On ROTC Letter

To the Editor:

Fortunately for the reputation of Mr. Michael Wayne, his name was misspelled in his letter, "ROTC, A Form of Brainwashing" which appeared in the last issue of the Tech News. To put it mildly, I thought that piece of literary trash was not only deplorable, but totally unnecessary.

Relying on a sarcastic quote by some ignorant traitor from the American Deserters Committee (which actually had nothing to do with the voluntary ROTC issue) to dramatize his point, Mr. Wayne went on to enlighten all of us "unaware conservatives" on the brainwashing tactics of the ROTC Department. Pure fabricated nonsense. The clincher, though, was the concluding statement which exclaimed, "Help Fight ROTC!" I was so moved, I didn't even bother to burn a Xerox copy of my draft card.

Just in case there are any unaware liberals reading this, Tech students HAVE awakened to the ROTC issue, and even the ROTC Department and the Administration recognize the general desire for a voluntary program here, and want to cooperate. Although I think the three year transition period for the changeover to a completely voluntary ROTC program is too long, at least the trustees are coming around to our side, for once. Militancy against ROTC will only alienate them. Besides, Mr. Wayne, "fighting ROTC" has ambiguous implications in that you're condoning the use of militant force against the military which you apparently do not condone. Think about it.

I commend the organizers of the ROTC forum for their integrity in seeking a sensible way to air the views on ROTC. Such an approach is the only way to publicize student demands and realize our goals here at Tech.

That letter on brainwashing did leave one minor question in my mind. Does the American Deserters Committee set aside funds to pay for the funerals of its martyrs? I guess they don't need to, though, because the only thing they have guts enough to do is criticize and then run like hell. It's the safe way, all right, but it doesn't take much of a man to subscribe to it.

Sincerely,
D. L. David, M211

IFC Blockades Boynton,
Asks Donations, Food

Boynton Hall, the campus administration building, was taken over for a day by the Interfraternity Council Involvement Committee on Thursday, March 27th. This was a result of the Council's hope for more interac-

the following day without a food or monetary donation.

On Thursday morning protesters, complete with signs, took over the building, and sought contributions from all who entered the building. President



Students confront Professor Rodenberry at entrance to Boynton Hall.

tion between the students and faculty, and was also staged to serve a worthwhile purpose.

It began Wednesday when notices went out alerting the campus as to what was about to happen. The notices warned that no one could get into Boynton Hall

Storke was being held prisoner until a list of tongue-in-cheek demands were met:

- 1.) The faculty, administration, secretaries, and students meet the ransom demand of food for needy families.

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THE
FACULTY
PEN



Vegetable Soup

by Prof. F.A. Anderson

Once upon a time, there was a fellow by the name of Walter P. Industry who operated a small restaurant.

Actually it wasn't really a restaurant but more like a diner. He only had one stool in his place to serve the customers and he only had one item on the menu — vegetable soup.

Even though Walter had only a small place, people came from miles around to get his vegetable soup. There were other places in town which also served soup but Walter had the best vegetable soup around. If one wanted chicken soup, the place to go was Clark's; for beef soup you couldn't beat the Crusader; you could even get pea soup locally at the Greyhound.

There wasn't any real secret to Walter's success—he got up early each morning and went to the market to select only the freshest and highest quality of vegetables; then he carefully washed and peeled each vegetable before putting it in the soup pot to simmer slowly for the rest of the day and all through the night.

Walter couldn't produce much soup this way but he was happy in the knowledge that he was turning out a good product and he had no trouble selling what he did make.

Now Walter had a wife who was ambitious for him. She wanted him to expand his operations, add a neon sign and a parking lot; even offer a greater variety in his menu. As she had so often pointed out to him — all he had to do was to leave the vegetables out of his soup and he could then offer his customers two kinds of soup — vegetable soup with vegetables and vegetable soup without vegetables. This would obviously increase the business and add to his recognition by the public.

Walter finally gave in to her nagging i.e. took the path of least resistance. He didn't have the funds to put in another stool and to add a parking lot so he had to incorporate the business and sell stock to raise the capital.

The new board of directors now assumed control of the operation and decided that if two stools were better than one, then four were better than two. They realized that it was impractical to go to the market each day in search of all the vegetables they would now need and didn't see the need for washing and peeling each one so they decided to purchase frozen vegetables which (presumably) had already been prepared.

Another problem was that Walter had always used only one gallon of water to every one hundred pounds of vegetables. This seemed unrealistic and so the board of directors appointed a committee to study this important question. To ensure a balanced opinion, they selected one cook, one janitor, one waitress, one parking lot attendant and the garbage man to serve on this committee. The committee met and after deliberating for nearly an hour decided to try 2.63 gallons of water rather than one.

When the new place finally opened for business, things were wonderful for a few weeks but then it became clear that even the vegetable soup with vegetables wasn't moving very well.

After a lengthy meeting the board of directors decided that the obvious move was to hire a new public relations firm to step up their publicity to include both radio and television coverage. This would help build up a better public image and move the soup.

Meanwhile, Walter has been retired and has started to make a little soup at the old folks home for a few friends.

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TECH RESPONDS TO THE PLANNING REPORT

by
Glenn White

The Future of Two Towers, the progress report written by the president's planning group, is naturally of great interest to everyone involved with Worcester Tech. This reporter tried to find out, during the last hectic week of grade-calculating and exam-taking before spring vacation, just what the overall reaction was to the report. The most frequent reply was, "I haven't read it enough to comment on it. I'm going to read it during spring vacation when I will have time to go over it." But some faculty members and a few students had read it thoroughly enough to comment.

Their overall reaction seemed to be very favorable to the report, with responses varying from wildly enthusiastic to a somewhat cynical view. Alan Gradet, a sophomore, commented, "They cover everything. It's very systematic. Instead of just cutting down the school, it gives what is good and tells all of what is bad, then offers a solution. I'd like to see a lot more copies of it." The last was a frequent student complaint, that not enough copies had been placed where students could readily read them. It should be mentioned that three copies of the report are now available at the reference desk in the library.

Gerry Axelrod, a senior, was a bit more cynical, commenting that it was a "good step in the right direction, but only one step. Implementation is the key." Paul Cleary, a sophomore, stated that the report was the "first time this school has been truthful about itself."

The faculty also had varying opinions on the report, although all seemed to like the report. Chemistry professor William Hobey pointed out, "One has to view it as a progress report. Many options have not been investigated. . . . It is not complete because it, deliberately, doesn't have specifics." Professor Allan Parker, head of the physics department, added that the information contained in the report was already known, but that it was good to have it assembled. In this vein, Professor of Electrical Engineering William Grogan explained, "The document, by its nature, analyzed the present situation, and, since it is accurate, did not produce startling information. It's startling to see them together. . . . It provides a jumping-off point for something we've never done before—that is, to determine where we're going. Nobody saw the problems before in their entirety. . . . It's the most significant document I've seen in many years. On the whole, it gave a very accurate appraisal of the situations it described."

When asked to describe the reaction of his colleagues to the report, Professor Grogan replied that the response was a "mixture of apprehension (when confronted with cold reality) with expectation of an opportunity to make Tech a really exciting institution."

A few disagreements with some of the specific statements of the report appeared. At one point the report states, "Of all departments visited by the Planning Group, only Physical Education has supplied a clearly defined set of departmental objectives." Professor Wilmer Kranich, head of the Chemical Engineering department, answered a question about this by stating that he thought it was a "bit overstated. The departments are in the process of planning for the future." Professor Grogan commented, "In general, departments have not planned for a longer period of time than the college. It's hard for a department to have a long range plan if the college doesn't."

At one point, the report went into the multiplicity of graduate courses, where different departments offered different courses covering apparently the same material. Professor Parker commented here that advanced courses might be specialized enough to justify different courses and that just combining courses under the same name, whether on the graduate or undergraduate level, would not necessarily save a lot of money. Professor Harold Hillsinger of the Physics Department warned, "I'd hate to see them abolish the graduate school. A lot of professors would be leaving if the graduate school was eliminated."

Professor Back commented, "The words 'trade school' should not be brandished around too easily. Tech has not been a trade school and calling it that could give the school a bad image. Many students may not be so interested in the theory as in the applications. We should distinguish carefully, though; they are not technicians but technologists."

This question of just what Tech was training its students to be brought a lot of comment from those interviewed. Alan Gradet commented, "Students should be trained for new ideas rather than as technicians." Professor Hobey added, "Do the faculty and administration understand what they are doing to the student? Many professors think we're educating engineers, but five years after graduation less than half are in engineering. I'm not sure if we really understand what we're doing here now."

Professor John Meader of Chemical Engineering, declared "I know we can't continue dead-center as we are now. We're straddling both sides of the fence—the trade school side and the scientific-research-oriented side. We're got to step into a leadership role, we can't compete with MIT." Professor Parker commented, "The school's been successful in the past, but that doesn't mean it will be in a changing world. Engineers don't have the exposure to the social sciences necessary to have influence in government decisions."

The student role in planning was also discussed by some of the people interviewed. Professor Hobey asked, "Will we be

able to attract the particular student for the program chosen? The role of the college has been to bring up the disadvantaged. Can we attract the present disadvantaged? The student would have a better feeling for this than the faculty." Professor Kranich added, "Student input will be very important, particularly for faculty understanding of what is behind the changes in student desires." Professor Grogan commented that there was a paradox in student involvement and wondered "how students can visualize the college with a totally different type of student body", but then added that it was a limitation on faculty members also.

Paul Cleary commented that the report "had a pretty good point about the type of person who applies here. I don't know how we manage to get so many the same. Maybe admissions should go out and try to find different types."

A great deal of support for increasing the humanities at Tech was voiced. Professor Hillsinger commented, "I do believe we have to liberalize our humanities program and make our curriculum more flexible. I would not want a son of mine to come here unless he was very sure of science and engineering." Professor Back added, "I'm highly pleased to find the emphasis on humanities in the report. I hope that we will get students interested in humanities and willing to apply themselves. . . . I would like to see, as a result of a broadened humanities program the position of language strengthened on this campus."

The report also listed several alternate objectives, one of one of which the school is to pick for its goal at the end of next year. Professor Hobey wondered, however, "Is a single goal for Tech feasible?" and Professor Hillsinger added, "I don't know if it's good for the school to say this is our objective; the situation may change." Professor Kranich commented that the report "didn't do what I had hoped—I had hoped that the report would assign some preferences to the objectives. I feel that the outcome, if it is the result of a joint faculty-administration effort, will be a combination of objectives."

Professor Marcus, of the civil engineering department, voiced the opinion concerning the planning committee that "they seem to be in favor of the Oxford-Cambridge style of school. They seem to feel that our present school is 'high-quality education in engineering and science' and favor more emphasis on science. They want to take the emphasis away from applied engineering."

Professor Harit Majmudar, of electrical engineering, commented, "There are several objectives which are appealing. The college probably will come out with a combination. We have to increase the humanities and social sciences. We need more students who will be getting degrees in these departments, and, secondly, we have to increase the level of gradu-

ate study and research. . . . I'm personally in favor of any objective which does this."

Professor Hillsinger expressed strong support for combining Clark and Tech into a single university. "Tech and Clark are both good schools with good reputations. Combining them could only help their reputations. We could triple the curriculum without extra expense. . . . We just can't keep raising the tuition. . . . They want to double the courses offered here, but can't do it without doubling the faculty and we can't afford that." Professor Grogan disagreed, however, commenting that combining with Clark "as an ultimate goal, is a very definite possibility. But there needs to be within Tech a strengthening of our programs, especially in the humanities and social sciences area." He also thought that the geographical division would be a problem, but declared, "If we can develop strength in these areas ourselves, and then add the unique capabilities of other colleges, then we would be very sound."

There was also some enthusiasm for the Oxford-Cambridge type of education. Paul Cleary commented, however, "The Oxford-Cambridge type would be something new for this country. I get the impression that this place isn't about to be the first to try something new."

In conclusion, a comment from Professor Hobey, "With some of these goals we're going to have to be ruthless. It's going to require a lot of work, and the final decision will require a lot of commitment."

GROK

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last hope for a widely accepted black leader who would accept nothing but nonviolent measures to obtain progress for the black. Malcolm X once commented, "Whites better be glad Martin Luther King is rallying the people because other forces are waiting to take over if he falls." and wrote in his autobiography, ". . . in the racial climate of this country today, it is anybody's guess which of the 'extremes' in approach to the black man's problems might personally meet a fatal catastrophe first — "non-violent" Dr. King, or so-called "violent" me. "I also recall a recent black definition of non-violence: "non-violence: a doctrine espoused by the late Mahatma Gandhi, the late Dr. Martin Luther King, the late Senator Robert Kennedy . . ."

One characteristic of General Eisenhower and other men of his era was their great optimism about the future, their belief that America would survive and would continue to be a great nation. At least part of their reason for this optimism was their feeling that God would protect the country and furnish us the leaders who would guide us out of crises. If one accepts this, then the next step is to wonder if we've killed off the men who were meant to save us from ourselves.

During the procession last Sunday, a baby cried. It was appropriate, for, by the time that baby reaches the age at which Eisenhower died, he will have seen men far greater than Eisenhower appear to lead — or else will have seen the end of yet another great nation.

WHITCOMB

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speeds than the normal flow of air along the bottom. It has to flow faster because it has a suddenly greater (curved) distance to travel. The result is much lower pressure on the top of the wing. It is this lower pressure, or upward suction, that gives a plane most of its lift.

The system runs into trouble when the plane nears the speed of sound. The speed-up of the top-of-the-wing air brings it to sonic speed long before the plane itself is at that speed. This produces a shockwave on the top side. It does not, of itself, cause anything like the slowing effect of the shock waves generated when an entire plane hits the sound barrier, but it does something else. The shock wave atop the wing acts much like a stick immersed in a flowing stream of water. It causes the once-smooth flow of air farther back along the wing to become extremely turbulent. The turbulent flow causes loss of lift in that area, and a great increase in drag, and it can produce severe buffeting that would rattle the teeth of airplane passengers. That is why today's airliners have top speeds well below the speed of sound.

How would the Whitcomb wing overcome the problem? The new wing is flattened in the critical area midway from front to back. There is no sudden jump of the topside air flow to supersonic speed, and the peak speed does not become severe enough to produce a turbulent airflow toward the rear. The air keeps flowing smoothly across the entire wing, even though it is supersonic most of the way.

Boynton Blockade

(Continued from Page 2)

- 2.) Amnesty for all food rioters.
- 3.) Have the sundial in front of Boynton Hall fixed so that it doesn't run 10 minutes fast.
- 4.) Next week off to think over our actions. (Mid-term recess)
- 5.) More money for the school paper so that it can have a color comic section.
- 6.) Increase the number of co-eds sixfold.
- 7.) A choice between R.O.T.C. and Salvation Army R.O.T.C. so that the girls could take part.

A fine response from the college helped to gain President Storke's release and also involve Worcester Tech in a worthwhile community project. The proceeds were given to the Salvation Army to distribute to needy families for Easter dinners.

An article from the Worcester papers was picked up by Associated Press and was read as far away as Florida by vacationing Techmen; they also heard it over the Mutual Broadcasting System radio as they were travelling down. Maj. Logan, formerly with the Tech R.O.T.C. Department and presently in Viet Nam, read about the "blockade" in the Army News-