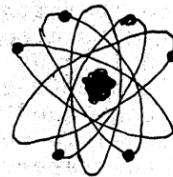


# THE STING

SOUTHERN TECHNICAL INSTITUTE

MARIETTA, GEORGIA

## NUCLEAR POWER ISSUE



### MEET THE PRESIDENT

On Wednesday, July 16, 1980, Dr. Stephen Robert Cheshier was named as the first President of Southern Technical Institute. He was formerly a professor and head of the Department of Electrical Engineering Technology at Purdue University. He assumed the duties of president of STI on September 1, 1980.

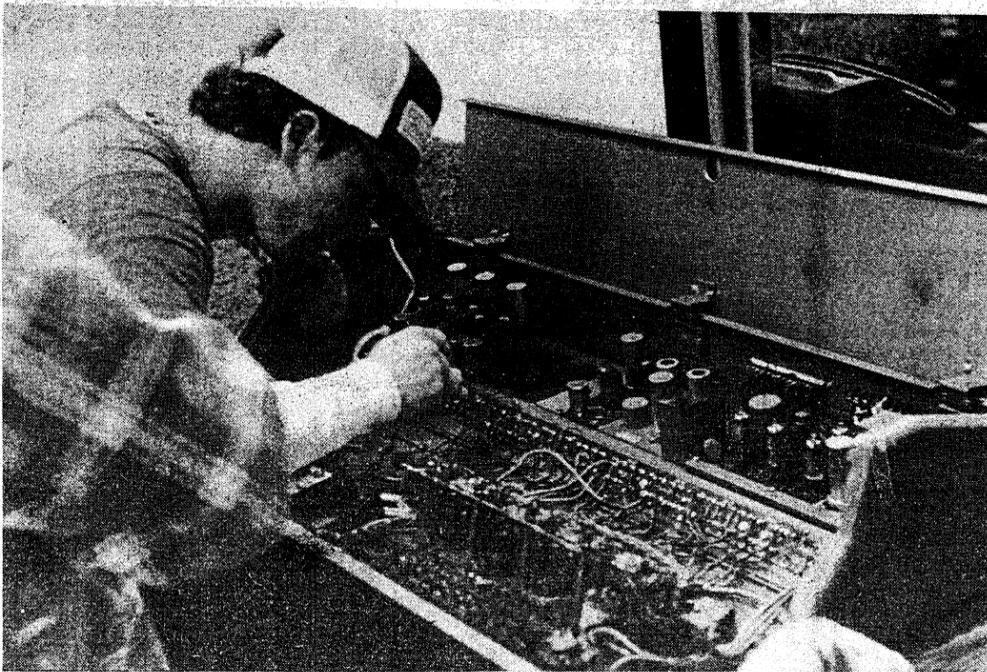
Dr. Cheshier, age 40, has been teaching at Purdue University since 1970. He earned his doctorate in Vocational-Technical education from the University of Illinois, his master's in Electrical Engineering from Purdue and his bachelor's degree in physics from Memphis State University. He is a graduate of 30 diploma programs in engineering and technology and has extensive administrative, educational and industrial experience.

Before joining the faculty at Purdue in 1970, Dr. Cheshier served in the U.S. Navy, serving as an electronics instructor and as a maintenance supervisor.

Dr. Cheshier has published in a number of professional publications and is active in national engineering technology associations. Since 1978 he has served as a member of the Executive Council of the Engineering Technology National Leadership Institute. He has chaired sessions at all National Engineering Technology leadership institutes and served as 1978 conference chairman. He has served as an educational consultant for a number of industries and colleges and universities through the U.S. and abroad. He and his wife Joyce and their two sons reside in West Lafayette, Indiana.



(SEE INTERVIEW P.10)



### WGHR HAS A NEW LOOK

Engineers are hard at work to supply "WGHR" with a production studio. This will be completed some time in late October or early November. The Engineering Department at "WGHR" eagerly awaits the broadcasting transmitter which will enable the station to start operating on

102.5 on the FM dial according to Lee Blaylock, General Manager "WGHR". "WGHR" had to send the first FM transmitter they received back to the manufacturer because it was recalled. According to Blaylock, at least a 3 or 4 week delay is expected before another transmitter can

be shipped.

Lee Blaylock, says the station was granted a one year extension on its FCC license to allow for the transmitter's delay. The license now in the station's possession was to have expired had the facility not gone on the air by October 15. With a crew of 20 volunteer students, the 16.6 watt station will have an expected broadcast range of about 3 miles, Blaylock said.

Blaylock is asking that all students interested in radio broadcasting or station operations should come by the station during normal operating hours and apply for a position. Blaylock says, that station format will play what he refers to as Progressive "Top 100". "We will concentrate on breaking our musical audience into new sounds." Blaylock says the station will stop playing a song once it is played continuously by other radio stations or is placed among the "Top 40" hits.

News Director, Chip Vahey, says, "things are really shaping up here, each department is working for and with each other and positive results well out number the temporary problems that may occur. I can't wait for us to go FM."

Chip Vahey

**WELCOME BACK**

I'd like to take this opportunity to welcome all the new and returning students to Southern Tech for Fall Quarter. I hope everyone is as psyched up for school as we are (ugh!). Anyway, you might notice some changes in the STING this year. First, I'm not Steve Thornton; Steve has now retired to a condo in Miami, but he has left us a fine newspaper and I hope I can fill his shoes and continue the tradition of a responsible and responsive student newspaper.

To help accomplish this, we have changed the publishing dates from weekly to bi-weekly. With the additional time available to the staff, we feel strongly that we can add more quantity and more quality to the newspaper. The STING will continue to serve the campus as a source of information about student activities, clubs, athletics, etc. We have even expanded this coverage to include the new intramural program, more information about job opportunities, and we're going to take a closer look at what Southern Tech graduates have been up to. You'll also notice more information about community affairs and what is going on at other schools. Since our school has become an independent college, it is imperative that we reflect that larger role in the community and in the state school system. We feel that the STING can act as a standard bearer and show off the best qualities of our growing student body.

But we can't merely isolate ourselves from the rest of the world by just covering the news that directly affects our campus. Our students here have a very large responsibility for the future. The job market now and in the future will continue to

require a large number of technical-engineering oriented education from college graduates. Who is better equipped to serve that need than we are? This is already reflected in our excellent job placement record for graduates. Along with the knowledge to better serve our country, comes the responsibility of all of us to speak up intelligently and loudly when it comes to issues of national importance. More often today we are faced with problems and solutions that require a science related education to understand; such as energy, environment, food shortages, resource management, etc.

To better prepare our students to meet these challenges and to make responsible decisions for the future, we have chosen to make each issue of the STING more topical. We will focus, each issue, on a current field of interest as it relates to recent news, and how it relates to us. We feel that these topics demand the extra attention of our student body and we're confident that you will come away more informed and better equipped to make a responsible decision yourself. We encourage any ideas, criticisms, or praise that you can offer and we hope you enjoy reading this first issue, which deals with nuclear technology.

Thank you,  
E.R. Auerhan  
Editor

**"WHAT ME WORRY" Nuclear Deterance**

Since the apocalypse of nuclear weaponry, humanity has been encumbered by the threat of final and all-out nuclear war. Arms limitation talks wax and wane. The bomb's own

existence has dissuaded its use so far. Though not a recognized political luminary, I have developed a plausible solution to the problem. In fact, if followed precisely, my plan will lay the foundation for a millenium of world peace and harmony. It is as follows:

Late one night, the President locks himself in the oval office. He gets a map and picks out a small un-aligned foreign country. It doesn't matter which one, one of the more unimportant countries. By reason of example, let us assume he picks a tiny country called Lumponia. The President picks up the telephone. He arranges for two or three dozen ICBM's to completely and utterly destroy the country. The President then goes to bed.

The next morning, Lumponia is nothing but a smoldering pit, a gaping variole, a pockmark. The President and senior officials, as previously arranged, act as if nothing happened. The press is frenzied. They tear up the White House lawn in atwitter, waiting for a press release. No comment. The U.N. calls. The President doesn't answer the phone. The major powers call, asking for some explanation. Why was Lumponia destroyed? No response. No hint or innuendo regarding the moribund passage of the tiny Lumponia.

That's all there is to it. Imagine the influence the White House would wheel! The next time there was a sign of international trouble, territorial aggression, for example, the President just picks up the phone and . . .

"Hello!Hello! How are you? Yes. Yes. Good. Say, listen, the reason I'm calling is . . . well, you know that ruckus you're making on the Border? Well . . . do you remember Lumponia?"

That's all that need be said.

Greg Wagstaff

**The Sting Staff**

**Eddie R. Auerhan · Editor**  
**Stephen Cantrell · Reporter**  
**Terry Drayton · Reporter**  
**Mike Payne · Reporter**  
**Greg Wagstaff · Reporter**  
**Ken Shaw · Sports Editor**  
**Steve Causey · Typist**  
**Richard Bostic · Artist**  
**Dr. Carol Barnum · Advisor**



OCTOBER 10, 1980

## MEET THE PREZ

(FROM P.1)

The following interview took place on Oct. 2, and was conducted by E. R. Auerhan, editor of the STING:

QUESTION: Why did you want to become our school's President?

ANSWER: I wanted to become Southern Tech's President because I have always admired the school's reputation; I had known about the school for years and met several people from here. In recent years STI has become the biggest Engineering Technology school in the country, in terms of graduates, and I knew it was the first school to become accredited. I guess the overriding reason was because it is the only school in the country that I'm aware of that has devoted its entire mission to Engineering Technology and that has been my life for the past twenty years (at Purdue)

QUESTION: Do you expect any significant growth here at STI, like you experienced at Purdue?

ANSWER: I would hope we could grow. We need about 3,000 students to accommodate the significant new building program that is planned. I don't know why we couldn't grow bigger than that. We need more personnel and more activity in the recruiting department. It's simply a fact that many high school counselors are unaware of what an Engineering Technology program is; and we're trying to improve the lines of communication between our recruiting people and the community. If we were better staffed in the Admissions area, I know we could recruit more students than we have. We haven't really tapped the market in high school students interested in Engineering Technology. Technical careers are the growth careers in the next twenty years and young people will be looking towards us to provide that education.

The potential is there to grow to 5,000 students, but any growth has to take place within our resources.

QUESTION: Can you give us any information about physical changes itself, for the near future?

ANSWER: We are waiting on the final plans proposed by our architects, who were commissioned by the Board of Regents last Spring. These plans would include a computing facility, recreational fields, a new classroom building, a continuing educational facility and more. But, these plans are still in the preliminary phases.

QUESTION: Even though the student population has been increasing steadily in the past few years, the freshman drop-out rate has been--well, alarming at times. Do you have any comment about that?

ANSWER: Yes, I'm very concerned about that. Although the drop-out rate here of between 40 and 50 percent is typical of the whole country, it still is alarming. To the extent that we can do something about that, we need to make it a high priority. As faculty members, we can be more sensitive to the problems of freshmen, to the needs of freshmen. As an Administration, we need to identify the reasons that freshmen leave rather than just not have them show up one day and not know why. Some of them could be prevented probably, if we could sit down and find out what the problem is.

I think a lot of it is just that it's difficult for college freshmen to perhaps for the first time in their lives, to discipline themselves; set up good study habits; determine priorities, and handle the personal freedom that they never had up until this point. There is no one bird-dogging you to do this or do that; you don't get detention or warnings, or have to stay after school, or things like that. It takes a developing of maturity and apparently half the students develop that maturity and some number of the other half don't.

QUESTION: Along the same lines, do you expect any increase in the Special Studies Department?

ANSWER: Well, it saddens me that high school graduates come into college without the ability to read or compute algebraically; it seems that these are reasonable skills to expect from the public school graduate. But apparently we do get quite a few who do not have these skills, so I think we are in the Special Studies business to stay. To that extent, we do need to maintain our facilities and improve or expand them as necessary. I must add that our Special Studies program is successful and I've learned that those who do complete the Special Studies program, have every likelihood of success. So I think we are salvaging people who otherwise wouldn't get a degree.

QUESTION: In past years, Southern Tech has enjoyed an excellent placement record for graduates and a healthy relationship with local industry and the community. Do you see any changes in this relationship?

ANSWER: I would like to enhance that relationship. It's hard to improve on the placement record, but I think the more opportunities graduates have, the healthier the situation is. So, the more that industry is aware of our program, the better opportunities

Page 3 The Sting

will be presented for graduates. Engineering Technology has made great strides in the past ten years as far as industry awareness, but we still have a long way to go. We need to improve our public relations in the community, in the region and in the state, so that everyone around the state will know what we're about.

QUESTION: There seems to be a lot of prejudice on the part of graduate schools regarding the admission of our graduates into their programs. Even though we have a lot of respect in the industry, graduates do encounter difficulties when they leave here to pursue professional degrees. What can we do to improve that situation?

ANSWER: The problem hinges on the amount of math-science that our students have when they apply for graduate studies in the technical fields. Most of our grads pursue Master's degrees in the business and management fields, which presents no problem at all. Statistically, very few go on to pursue professional degrees in the math-science fields. There is simply no way to get around the fact that there will have to be some makeup work in math-science for the Engineering Technology graduate to pursue his professional degree. I can see someday where we can offer the higher levels of math-science as an elective, but we can't require these courses for our own degrees. Another part of the problem is we haven't developed

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### THE STING NEEDS YOU!!!

We are looking for writers, cartoonists, paste up people, or anyone who wants to vent their anger in print. We also have an opening for an Advertising Manager. This position is an excellent opportunity for someone who wants to make BIG BUCKS!--even more than a Georgia Tech Grad! If you're interested in any position on the STING, drop me a note with your name and telephone no. in the box outside the STING office. I will get back to you promptly.

E.R. Auerhan  
Editor

Because of the new bi-weekly format, letters to the editor, club announcements and special items, must be turned into the STING office no later than the Tuesday before each Friday publication date. For our next issue, this date is Oct. 21, by 12:00 noon. All letters will be read and considered for publication by the editor; but, they must be signed and dated. All correspondence should be placed in the box outside the STING office. Look for our next issue Friday October 24, focusing on alternate energy sources.

# THE STING FOCUS: CITIZENS REJECT MAINE YANKEE REFERENDUM

## RENEW PLANT CONSTRUCTION

Recently, we've seen a new mideast war, a rise in OPEC's minimum price for oil and a continuing rise in national oil consumption. Once more America finds herself desperately dependent upon an unpredictable and non-renewable source of energy--foreign oil. Let's face it; the very lifeblood of America itself is electricity. Without a cheap supply of electricity, we would have no industry, no communication or transportation, no progress. With such high stakes on the line, we are amazed that America is still at the mercy of nations and events which can never guarantee the uninterrupted flow of oil to supply our growing energy needs. Why has it taken us so long to realize that we can't depend on anyone else; that we must be able to satisfy our own energy needs independent of foreign influence. The most important objective facing us in the next twenty years is to supply our own energy both abundantly and cheaply.

The sad thing about our present predicament is that we've had the technology and ability to become energy-independent for some time now. But because of public misinformation, media irresponsibility and bureaucratic inefficiency, we have been unable to agree on a comprehensive energy policy. What is worse, for every reason but a good one, we have ignored and even prevented the use of the cheapest, cleanest and safest source of energy this country has ever had--nuclear power. We don't understand why some people are so misinformed as to vehemently oppose the renewed construction of nuclear power plants. These people hold tenaciously to ungrounded fears and apprehensions and then spread these half-truths through the media into the minds of the general public. People are just now seeing this pattern of mis-

information and are beginning to get their facts straight. We commend the citizens of Maine for ignoring the scare tactics of the anti-nuclear coalition and rejecting the referendum to shut down Maine Yankee. It is apparent that the voters asked the important questions, got accurate answers and then went out and voted their conscience.

One of the most important questions concerning nuclear power plants, on everybody's mind, is safety. In this issue you'll learn that nuclear power plants are much safer than is widely believed. The chances of a nuclear explosion are non-existent and the plants themselves are made to withstand even the most severe sabotage attempt. The release of radiation around a plant is not a problem either. The fact is that a nuclear plant releases far less radioactivity than a conventional coal or gas burning power plant. Even when damaged, the radiation released is negligible. Nuclear power plants are environmentally safe and economically sound. The waste product is easily manageable and does not pollute the air we breathe or the water we drink.

Nuclear power plants are the cheapest means for producing electricity that this country has. The best thing about them is that they are not dependent upon a foreign country for their fuel supply. We call upon industry, government and the general public to press for the renewed and accelerated construction of nuclear power plants so that America can be on her way towards complete energy independence.

E.R. Auerhan  
Editor

On September 23 of this year, Maine residents decided by referendum vote the fate of its only nuclear power plant. By a margin slightly greater than 3 to 2, the referendum was defeated, and Maine Yankee was allowed to remain open.

The referendum generated more public opinion than any other single issue in Maine for the year thus far. Coverage of the hostage crisis in Iran, Soviet intervention in Afghanistan, and public debate between presidential candidates all often took second place in the headlines as the voting day approached.

The much-contested issue arose after the highly-publicized Three Mile Island incident. Ray Shadis, a sculptor and sometime farmer from North Edgecomb, Maine, grew concerned over the question of safety for those people living in proximity of the atomic plant. Citizens for Safe Power, a local interest group led by Shadis, began a petition drive to bring the question of closing Maine Yankee to a referendum. By February, 1980, Shadis and his group had nearly 56,000 signatures--more than enough to insure a referendum vote in September.

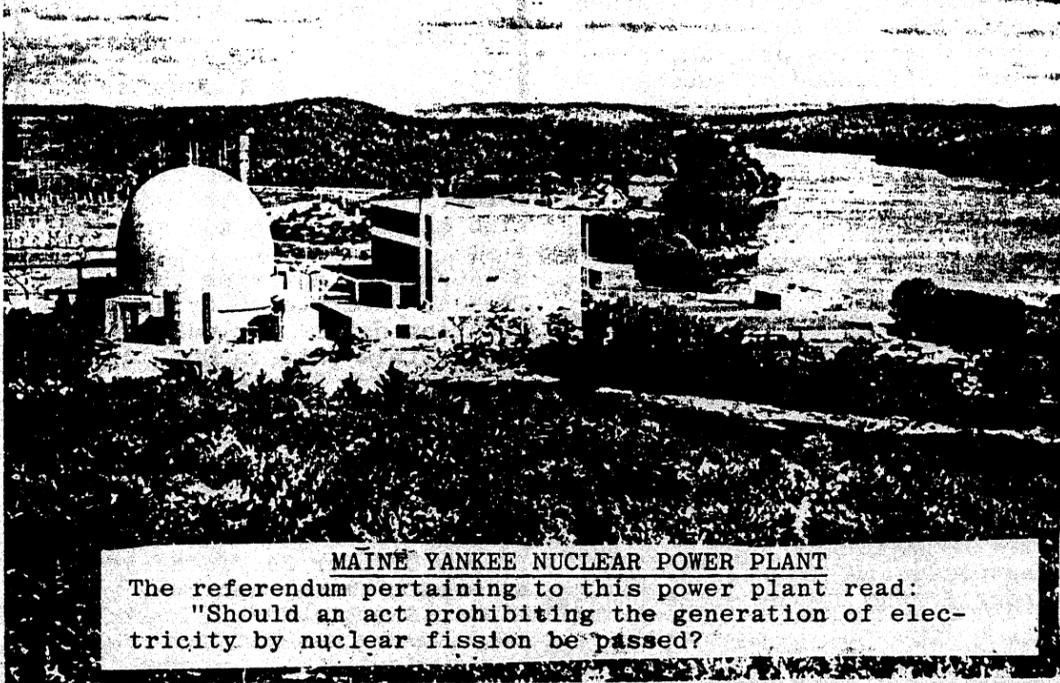
Central Maine Power quickly countered, stating that the plant had the best safety record of any nuclear facility in the nation. In May of 1979, the plant withstood an earthquake of 4.0 on the Richter scale; proof, said CMP, that the plant was of sound design and construction.

Yet CMP's main argument for keeping the plant open was economics. The Yankee plant provides one-third of Maine's electricity at a cost of 1.6 cents per kilowatt-hour. Other operations that involve either coal or oil cost nearly 5 cents per kilowatt-hour. If the plant were taken off-line permanently, the missing third of electrical need would

have to be provided by a coal or oil-fired generator--and this would make a kilowatt-hour rate of more than seven cents.

The month-long debate was on. Citizens for Safe Power addressed mothers with the concept that nuclear plants increased chances of birth defects. Central Maine Power provided facts and statistics negating the issue. A novelist who had borrowed the theme from the movie, "The China Syndrome," spoke of his beliefs that a meltdown was a very likely possibility--physicists who had worked in the field of nuclear energy for several years said that this was highly unlikely. When the Citizens' group said that Mainers could "get by" without nuclear generators, Bath Iron Works President John Sullivan said that "no nukes" equaled "high energy costs," and that this would inhibit competitive bidding for U.S. Navy contracts. Sullivan claimed that if the

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**MAINE YANKEE NUCLEAR POWER PLANT**

The referendum pertaining to this power plant read:  
"Should an act prohibiting the generation of electricity by nuclear fission be passed?"

# THE PARALLAX VIEW

QUESTION: Do you feel that nuclear energy is vital to society as an alternative energy source or is it a potential danger and why?

1) Anything that is not totally understood can be a potential danger, however it can be useful. For example, microwave, at one time, was not used because of the fear and the damages it could cause. Now the average housewife utilizes microwave. The same could be true with nuclear power eventually. With more experimentation, research, and sacrifices nuclear power could prove to be more useful and vital than we estimate. However, we still risk danger, but that is the chance we take in order to grow in a technical society.

Mike Wade

2) I do not know enough about it to be able to say that we should use it or that we should not use it. I believe that the government should restrict the building of new nuclear plants until they know more about the problems involved. They could obtain this knowledge from studying the existing plants.

Michael Harris

3) Yes. Danger is associated with everything on Earth. We just have to decide whether or not the risks will overshadow the benefits. In the case of nuclear power it statistically evident that the benefits far outweigh the risks.

Tim Horne

4) I feel nuclear energy is definitely vital not only to today's society but more important to tomorrow's society. Our natural resources are running dry. We must venture into other forms of energy for the benefit of our children. Nuclear energy provides 12% of our energy used in this country today. I agree improvements need to be made in the case of nuclear waste in regards to disposal. But, we can't afford to lose that 12% of energy today, and that 12% has to grow for tomorrow.

Kevin Harbreck

5) Nuclear power is a vital and efficient energy source. If strict safety measures and regulations are maintained in the future, then Nuclear Energy is something we can live with.

Paul Neuendorf

6) Nuclear energy can be vital to society if the long term effects are not too high of a cost. If there was a way of "properly" disposing of the radio active waste that could insure no contamination more people would be in favor of nuclear power. Three Mile Island showed the power plants safety, since the reactor almost completely failed but no contaminants were released. From this point of view nuclear power is safe. Cost of nuclear power is one of the cheapest ways to obtain power where hydroelectric power is not permissible therefore it may be part of the future.

Jacob Leverett

7) I don't know that much about the subject to give a good opinion and I feel most people don't know a great deal about nuclear energy and this makes the source dangerous. Ignorance can kill.

Larry Baxter

8) I feel nuclear energy is a resource of the future. As the other energy sources run down, we need an alternative source of energy. As it stands now, nuclear energy is not accepted and the world isn't ready for it. Also, just like all other sources there is a way to perfect it to make it beneficial for the people. Therefore, I feel that nuclear energy has a long way to go before it should be introduced as a major energy source.

Joey Lambert

9) The alternative to nuclear energy in the future is not accepted by the society of today. If nuclear energy was perfected, I don't think it would cause a threat to American lives. Nuclear power would outweigh the benefits in the cost of waste used each year from a power plant.

Caroline Melton

10) Nuclear energy is a highly technical field and needed energy source. With increased technology the safety factor of nuclear plants can be increased and more reliable method of disposing of the waste can be found. As society advances and technology advances nuclear energy will be able to play an important energy source in the future. Just because there are questions about its present reliability it is not necessary to stop development.

Kelli Richardson

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# THE EXPERTS SPEAK OUT

Professor Orren Williams, of the Mechanical Engineering Technology Department, received his bachelor's degree in Engineering Science-Mechanical from L.S.U. in 1976, and then received his Master's in Nuclear Engineering from L.S.U. in 1977. He has received another Master's degree from Georgia Tech in the same field and is now working on his Doctoral thesis. Professor Williams' interest in nuclear physics goes back to his youth when his father was building nuclear power plants. During a tour in the Navy, his interest veered towards the nuclear subs. He now does consulting work in addition to teaching the Physics elective Nuclear Reactor Technology. The following interview took place on September 29 and was conducted by E. R. Auerhan, editor:

QUESTION: Most of our visible public figures seem to agree that waste disposal is our most immediate problem with nuclear energy. Is there a real problem and a viable solution to disposing of nuclear waste?

ANSWER: The major problem with nuclear waste disposal is not a technical one, but a political one. Technically, what they do is they take the spent fuel rods out approximately once every 18 months, and then they remove about 1/3 of the core and store this for up to ten years. It is then sent to a "mythical" processing center and that's where the holdup is: we have no processing center for commercial plant wastes. There are several available for military waste processing, but none for commercial. Processing meaning the chemical separation of uranium which is still usable, from other radioactive elements of the spent fuel. The waste material is taken out of the reactor and diced up, then put in a solution and goes through the chemical separation process. The solution is drained off and solid waste is left. This solid residue is condensed down into a glass calciner cube approximately three feet wide on each side. The resulting rule of thumb is that if you use 90 tons of uranium ore, you'll be left with approximately one cubic yard of solid waste, which

is then stored. In the form of a glass calciner, the waste is waterproof and this is the biggest concern; that this radioactive waste does not enter the water supply. They would like to store this in salt mines for several reasons. First, the presence of salt indicates that there has been no water there for millions of years. Secondly, salt mines are very stable and solid--unaffected by earthquakes. This is all proven technology.

From a political standpoint, the problem is that no governor or senator wants to "open up his doors" to the entire nation's wastes, by building a reprocessing center. There has been one built in Barneville, South Carolina, but it is not functional. Commercial wastes are now being stored within the plants themselves. In a large 3,000 megawatt unit, the storage pool can usually hold up to ten years waste, and even so this does not present a problem. Spent fuel rods are like any used fuel, like used gasoline; except that used gasoline is not stored, it simply goes into the atmosphere.

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## FUSION POWER

### FUSION POWER--WAVE OF THE FUTURE?

To date, man has spent more time pursuing methods of nuclear fusion as a source of power than any other research project in recorded history. This is somewhat in contrast to the other very rapid technological developments of our time.

Commercial applications for fusion power were first thought to be available by the late 1940's. Now, over thirty years later fusion is just beginning to be widely accepted and deemed worth pursuing. Even though we still must devote more energy to achieve fusion than we receive through its result, industrialists routinely talk of investing large sums of money into further research with or without government backing.

The pursuit of fusion has had a difficult history. Early expectations were too high and resulted in setback after setback spanning many years of research. In the mid 1970's, the rapid development of laser-driver inertial confinement fusion (ICF) gave rise to hopes that a short cut to commercialization had been found. Now, however proponents of heavy ion drivers and neodymium glass lasers believe that ICF and perhaps any laser would not be practical in commercial use. The problems with laser fusion have made the government wary of funding major construction projects such as Antares at Los Alamos Scientific Laboratory and Nova at Lawrence Livermore Laboratory.

Construction is proceeding at the Tokamak Fusion Test Re-

actor however. The Tokamak facility is intended to reach the break-even point of energy invested versus energy received or know the reason why. The first TFTR figures are expected sometime in 1983.

The Princeton Plasma Physics Laboratory performed some of the earliest experiments in fusion. This facility is able to cause fusion when it is both heated and pulsed by a sudden increase in magnetic field strength. This compresses the plasma particles into themselves and also speeds them up which heats them. In the summer of 1978, the Princeton lab was able to reach a temperature of 75 million K, with 100 million K temperature being the theoretical level for a self sustaining fusion reactor. This was a very significant step forward and raised eyebrows in both Congress and industry.

Industry remains the main proponent of fusion power. General Dynamics set up the General Atomic Company but sold it to Gulf when it became involved in litigation over a uranium supply dispute. Yet, this San Diego based firm has a working fusion device on its premises that probably comes closest to the break even point of all. Known as Doublet III, the GA reactor is giving 1981 as a target year to reach break-even.

There are several other facilities in the U.S. being built in an attempt to harness fusion power. With major breakthroughs in the last few months, fusion power may be a viable source of energy in the nearer-than-expected future.

Mike Payne

## NUCLEAR MISHAPS

Currently, "there are 72 nuclear power plants in operation in the United States and 124 other plants are still in the planning stage or under construction" according to LIFE (May 1979). The existing 72 plants provide 13 percent of our electricity needs.

Nuclear power seems to be almost our only alternative energy source. For the moment coal will undoubtedly be developed more vigorously, however, with environmental side effects.

However, because of what society feels about nuclear energy and the prospect of danger or long range effects it can have on our lives, solar and wind power, shale oil and nuclear fusion are apt to become our alternative energy source.

More people became more aware and less confident in nuclear energy after the mishap at Three Mile Island. The accident at TMI was a case study in failure attributed to by "human error, administrative negligence, design flaws, mechanical collapse and bad luck." In the aftermath, "panic confusion, and a major disaster were imminent possibilities." When in reality the press had blown the TMI incident way out of proportion. To the media, it was total sensationalism.

Two year earlier in September of 1977, a similar accident occurred at another nuclear plant Davis-Resse. The problem was brought under control in 21 minutes and with no contamination to the environment. The problem at TMI was brought under temporary control in 16 minutes. Another incident occurred at Plant Hatch in Baxley Georgia, however, no serious damage was done to the environment.

These incidents should provide us with experience in prevention of others, however, stricter safety standards are needed. "When the realities of oil shortages and climbing gas prices take hold, atomic power will not look so bad."

Meanwhile, the Nuclear Regulatory Commission had claimed "That a serious reactor accident was as unlikely as a meteor or falling on a major city. In March 1979, five plants had to be shut down for not having been proved sufficiently earthquake-proof." Also, medical reports revealed that "the normal rate of leukemia doubled among Utah residents who were under 15 and living downwind from atmospheric nuclear tests conducted 20 years ago in Nevada. A spate of recent court cases suggests that exposure to radiation is even more hazardous than previously thought."

From the many nuclear accident that have occurred, no one died at TMI, Davis-Besse or Hatch, is it safe to assume that nuclear power plants are safe?

Terry W. Drayton

## THE AGING TITAN II

The September 19 fuel explosion of an underground Titan 2 missile at Damascus, Ark., resulting in the death of one and injury of 21 Air Force personnel and the evacuation of 1400 residents within a 5 mile radius of the site, has once again stirred up questions about the safety and effectiveness of the aging intercontinental ballistic missile system.

There are 54 underground Titan silos in the U.S. There are 18 in Arkansas. The others are in Arizona and Kansas.

The Secretary of the Air Force, Hans M. Mar, has said that the Titan II, "is the largest, most reliable, best missile among our space launchers." Titan was used to launch the Gemini space shots.

President Carter has called the Titans, "an integral part of the Triad," America's three way nuclear delivery system: bombers land-based missiles, and submarines.

It is by far the most powerful missile in the U.S. nuclear arsenal, the most relied on missile, and the oldest.

The first Titans were deployed in 1963. They have a range of 6,000 miles. They are the heavy artillery of the nuclear arsenal. Each Titan weighs about 300,000 pounds fully fueled, is 103 feet high, and about 10 feet in diameter. Its warhead is designed to withstand stresses of entry into Earth's atmosphere at 17,000 miles an hour. While the U.S. deploys 1,054 land-based ICBM the Titan II, with its nine-megaton warhead carries one third of the total megatonnage of America's land-based missile force. Unlike the new Minuteman III's, the Titan lacks a modern guidance control system and is considered useful only for destruction of large targets, such as cities and industrial complexes.

Rep. Bob Whittaker, a Kansas Republican whose district hold 16 of the states 18 Titans' silos said, "I believe it is too early to say that the missiles be disarmed and no longer relied upon. However, these missiles have caused considerable problems and concern in the past two years

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# SPORTS

## TENNIS

Plans have been finalized for the 8th Annual Southern Tech Tennis Tournament, open to all students and faculty. The tourney is scheduled to begin October 11, with finals schedule for October 19. Present plans are for all matches to be played on campus, with A & B flights in both singles and doubles competition.

Entry blanks may be found in the Intramural office in the gym, in the Department of Chemistry and Physics, in the Dean of Students office in the administration building, or in the Student Activities Office in the Student Center. The deadline for entry blanks is October 10 at 3 p.m. Entry blanks can be turned in at any of the above mentioned sites. The draw will be posted at 5 p.m. at the tennis courts October 10. Coordinating the tournament are Ron Wofford, Intramural Director, and Lee Tucker, tennis coach.

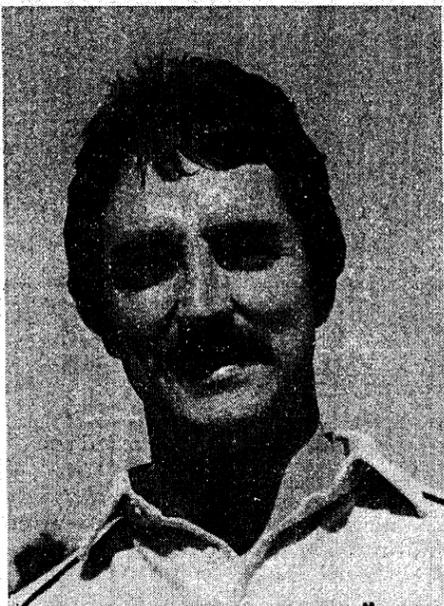
## GYM HOURS

New gym hours have been scheduled by Ron Wofford. For more information, phone 424-7349.

MONDAY THROUGH FRIDAY--Gym and Weight Room open 9 a.m. to 10 p.m.  
Equipment check-out 9 a.m. to 8:30 p.m.

SATURDAY--Gym and Weight Room open 10 a.m. to 4 p.m.  
Equipment check-out 11-4

SUNDAY--Gym and weight room open 4-10 p.m.  
Equipment check-out 4-9



This year Southern Tech has a new addition to its staff. It is Ron Wofford, who is the new intramural director. Ron graduated from the University of Arkansas at Little Rock with a B.S. degree in Recreation. He was assistant director of intramurals at Little Rock for two years. Ron has 12 teams signed up

## BASKETBALL

When most people think of athletics at Southern Tech, what do they think of? Of course it's basketball. The running Hornets have won district 25 for the past three years and have gone to the National Tournament.

This year's team should be no exception because of the five returning players and many good junior college recruits. Those returning from last years 25-10 team are Mike Jones, Billy Bromell, Baxter Thomas, Richard Stallworth, and Ken Shaw. Those coming out of junior college are

Ricky Hudson, Ron Ward, John James, Jeff Wright, Clyde Franklin. Also returning players from playing past years are Mike Muller, Mike Braun, and Tyrone Dean.

"I think this year's teams overall quickness is much improved" according to Coach George Perides, "The guys returning show much more leadership than last year's team. I look for a good year even though we have more district games this year and better opponents" Perides concluded.

Ken Shaw



Kneeling from left to right: Mike Jones, Cyrus Hunter, Ron Ward, Charlie Glass, Mike Mueller, and Richard Stallworth. Standing is Coach Perides, Ricky Hudson, Jeff Wright, Mike Braun, Ken Shaw, Tyrone Dean, Billy Bromell, John James, Baxter Thomas, Clyde Franklin, and Assistant Coach Stevens.

## INTRAMURALS

for flag football this year so far. Only 8 competed last year. Games will start at 5:15 with a 15 minute grace period because of labs.

There are four fraternities, five independents, and three organizations represented this year. So this year might see three conferences instead of two.

Also happening this quarter is Lee Tucker's tennis tournament. The purpose of this tournament is to raise money for the tennis team and to see prospective players. From this tournament, Ron plans to set up a ladder and another tournament in the spring.

Sports to look forward to

in the coming year are: billiards, basketball, bowling, tennis, volleyball, softball, and miniature golf.

Ken Shaw

### FLAG FOOTBALL SCHEDULE

Monday, October 13  
(1) TKE vs. Muffdivers  
(2) Geeches vs. Who's

Tuesday, October 14  
(1) BSU vs. BSA  
(2) ROTC vs. LAMBDA CHI ALPHA

Games begin at 5:15 with a 15 minute grace period.

# COLLEGE LIFE

Page 6 The Sting

OCTOBER 10, 1980

## PLACEMENT & CO-OP

## CAB

Friday, October 10 - Blount - CET, MET  
 Monday, October 13 - Stanley Consultants - CET, MET  
 Tuesday, October 14 - Western Electric Company - EET\*\*  
 Wednesday, October 15 - Texas Instruments - IET, MET  
 Thursday, October 16 - Texas Instruments - IET, MET  
 Thursday, October 16 - Duke Power Company - EET, MET  
 Friday, October 17 - Georgia DOT - CET  
 Friday, October 17 - Factory Mutual Engineering - ALL  
 Monday, October 20 - Newport News Shipbuilding - EET, MET  
 Monday, October 20 - Cox Cable - EET  
 Tuesday, October 21 - Southwire Co.  
 Tuesday, October 21 - Bechtel Power Corp. - CET, EET, MET  
 Wednesday, October 22 - Honeywell - EET, MET  
 Wednesday, October 22 - USAF - AET, CET, EET, IET, MET  
 Wednesday, October 22 - Hollingsworth - MET  
 Thursday, October 23 - Gould - EET, MET  
 Thursday, October 23 - Collings and Aikman - IET, TET, AMET  
 Thursday, October 23 - USAF - AET, CET, EET, IET, MET  
 Friday, October 24 - USAF - AET, CET, EET, IET, MET  
 Friday, October 24 - Shaw Industries - IET, TET  
 Friday, October 24 - James Robert Cheatham, Inc. - CET  
 Monday, October 27 - Kendall Company - EET, MET, TET

**NOTE: JOB NOTEBOOKS FOR THE ABOVE CAMPUS INTERVIEWS ARE POSTED ONE WEEK PRIOR TO THE INTERVIEW DATE. READ INFORMATION IN EACH NOTEBOOK BEFORE YOU SIGN UP AND LEAVE A COPY OF YOUR RESUME IN NOTEBOOK IF YOU SIGN UP.**

It is important to sign up for campus interviews early; if the response is poor, companies will cancel their schedules. If an interview schedule is full and you wish to schedule, see Mrs. Howard. Occasionally there are last minute changes or cancellations on campus interview schedules, so it is a good idea to re-check the schedule on the afternoon before the interview.

**RESUMES**-Information on resume preparation can be obtained in Placement Office Room 125 (on counter). Mr. Smith is available if you need additional help.

All graduates using services of the placement office should complete a registration card and class schedule (see Mrs. Howard). Also, when your resume is completed, leave a copy of it in the Open Resume File (notebook on counter) in Room 125.

**NIGHT SCHOOL STUDENTS** can see Mr. Van Gorder to get in the Placement Office after 5:00 P.M. to review job information.

Job listings for companies that will not interview on campus are posted in **BLUE FOLDERS** in bin in Room 125. Read information in folders and follow instructions. There are many good opportunities in this group.

**IMMEDIATE JOBS** - These are also posted in blue folders in bin. Many do not require a degree but the companies usually need someone NOW.

**PART-TIME JOBS** - Posted on bulletin board in room 125. Students should make direct contact on these and please do not remove the cards.

The following companies have schedule evening career programs on campus this quarter (watch for more information):

Wednesday, October 15, Southern Bell  
 Wednesday, October 29, Lockheed  
 Monday, October 20, Kendall Company  
 Tuesday, November 4, Milliken and Company

All these programs will be in the Student Center Ballroom at 6:30pm.

The following companies have schedule campus interviews for co-ops:  
 Wednesday, November 19, Southwire Company-departments announced later.  
 Friday, October 17, Georgia DOT - CET  
 Friday, October 24, Shaw Industries - IET, TET

ATLANTA GAS LIGHT has openings for EET students for co-op.

Additional jobs for co-ops will be publicized at a later date; however, any student interested in beginning a co-op program should check with the Co-op Office. See Mrs. Cochran.

### FALL 1980 CALENDAR

OCT 16 - CAB Movie, Student Center Ballroom  
 OCT 20 - Nick Varner in a Billiards exhibition  
 OCT 21 - Young Alumni Career Awareness Program  
 OCT 22 - Young Alumni Career Awareness Program  
 OCT 23 - CAB movie  
 OCT 27 - 29 STI Eight Ball Pool Tournament  
 OCT 28 - Regents' Test  
 OCT 30 - STI Magic Show featuring "Kramer & Co."  
 OCT 31 - Halloween Movie  
 NOV 6 - STI Talent Show featuring comedian A. Whitney Brown  
 NOV 7 - CAB Movie  
 NOV 8 - Goat Day  
 NOV 13 - 15 Cobb County Players present a play.  
 NOV 17 - CAB presents Tim Bays in a coffeehouse  
 NOV 20 - CAB Movie  
 NOV 25 - Red Cross Blood Drive  
 DEC 7 - STI Christmas Party for children of student faculty and staff with Santa Claus.

### TICKETS GET YOUR TICKETS

A special discount ticket will be on sale in the Student Center Office for the academic year of 1980-1981 (Fall, Winter, and Spring).

The card entitles a Southern Tech student, faculty, and a staff member to all films present during the regular CAB schedule for the low discount price of \$7. (a discount of \$3.50 off the weekly admission price of 50¢ per week).

Larry Panetta will be the CAB chairman for the 1980-81 year. All film suggestions should be directed to him. All films will be shown at 4 & 9 pm except the orientation film.

### SCHEDULE

ADMISSION IS 50¢

OCT 16 - ALIEN

OCT 23 - HARROW HOUSE

OCT 31 - LOGAN'S RUN

NOV 7 - GOAT DAY-"Rock N Roll" HIGH SCHOOL

NOV 20 - THE STUDENT TEACHERS

**THIS IS LIKE NO ROBBERY YOU'VE EVER IMAGINED.**

**11 HARROWHOUSE**

COLOR BY DE LUXE

PG



# CLUBS & ORGANIZATIONS

## ASME

The ASME will have a General Meeting on Tuesday at 12:00, October 14 in Room 601. All MET's welcome. Pizza and Coke will be served at the meeting.

## KARATE CLUB

The Southern Tech Karate Club holds regular workouts and lessons for both beginners and higher belts every Tuesday and Thursdays from 6:30 to 8:30 pm and 2:00 on Sundays. We meet in the Recreation Room of Dorm II. Stop by and see what you're missing in Physical Education.

## "LITTLE SISTER RUSH PARTY"

The little Sisters of Tau Kappa Epsilon would like to invite all interested women to come out and join us for our first little Sister Rush of 1980. to be held Thursday October 16, 8:00 p.m. at the TKE House.

Our regular meetings are held at the House every Thursday at 7:30 p.m. For more information or directions see one of our Brothers or call the House at 424-1979.

SEE YA AT THE PARTY!!!!!!!

## LAMBDA CHI ALPHA

The Brothers and Associate Members of Lambda Chi Alpha would like to welcome all new students to Southern Tech and welcome back all old students.

This fall started off pretty slow for us but it sure picked up for Friday and Mondays Rush Parties. We had an excellent turnout for both parties thanks to the hospitality of Mr. and Mrs. Rice at the Mimosa Motel.

The next party we will be having will probably be the annual Halloween party, so you need to start thinking up a good costume.

Contrary to popular belief, the fraternity does more than party. If you want to learn more about LAMBDA CHI ALPHA, come to our weekly meetings on every Thursday at 12:00 noon in Room 119 in the student center next to the snack bar area. Visitors are welcome.

## ASC/AIA

The ASC/AIA will have a special program on Wednesday, October 15. The speaker for the program will be Sidney Curtis, the ASC/AIA Georgia Chapter Student Representative. Mr. Curtis will be discussing student activities, project, and programs in the student chapters of the AIA. The meeting will be at 12:00 in Room 119 of the Student Center. Bring your lunch with you. Everyone is welcome. All AET students are urged to attend.

## INTERNATIONAL?

If you are an international student--or American--you are cordially invited to the next meeting of the ROTARACT Club which meets in Room 119, lower level of the Student Center every other Monday.

Rotaract, which is sponsored by the local Rotary Club, is a community service organization which promotes international understanding and concern. Every quarter, Rotaract sponsors several projects for the service of the community. Our most famous project is the annual sale of Southern Tech Bath Tub Racing T-shirts.

If you think you are interested, our next meeting will be held at 12:00, October 20.

**ALL VETERANS:** Your checks are late! Those who were here this summer received a check for just seven days. The rest will be delivered approximately the second week of November. The check will include September and October.

Be sure you have filled out your Status Form in the VA Office. If you fail to do this you will not receive your check.

## BRA

The BRA, Bath Tub Racing Assoc. will hold a regular meeting at 12:00 noon in Room 119 of the student center. Anyone interested is welcome to attend. Members are reminded that their 1981 racing season dues are due.

## BAPTIST STUDENT UNION

Are you having problems with college or family? Why don't you ask God to help you with your problems. Prayer is the answer. The members of the Baptist Student Union welcomes all new students to Southern Tech. The Baptist Student Union is a nondenominational club and would enjoy having you attend our meetings. We meet in Conference room A in the Student Center at 12:00 noon on Tuesdays.

## ATTENTION CIVIL STUDENTS

**AMERICAN SOCIETY OF CIVIL ENGINEERS.** The ASCE student club here at Southern Tech need interested CET students to help organize and continue the activities of the club. As the clubs' purpose is to aid you as both a student and an engineer, it is hoped that those interested will attend the following:

## ORGANIZATIONAL MEETING

THURSDAY OCT. 16, 1980

ROOM 509 CET BLDG.

ASCE

## AIIE

Southern Tech's Chapter of the American Institute of Industrial Engineers will hold its first meeting of the year on Thursday, October 9, 1980, at noon in room 214. The program will feature Ms. Fran Day, the Member and Chapter Services manager for AIIE's Headquarters.

AIIE is Southern Tech's student professional society for Industrial Engineering Technology students. The activities of the Southern Tech AIIE Chapter promote student understanding and appreciation of Industrial Engineering Technology. Programs include guest speakers and plant tours, as well as an annual international competition among all 110 student chapters.

Guest speakers are usually practicing industrial engineers or IET Technologists. They usually relate what it's like to work, in industrial engineering, in the type of industry or business they represent. Plant visits are arranged to show off the Industrial Engineering applications and projects represented in a variety of processes.

For the past three years the Southern Tech AIIE Chapter has placed among the top ten University Chapters in the annual Chapter Development competition. The competition consists of fulfilling a number of goals that promote the chapter members' contribution to their profession, their department, and their school.

The Southern Tech AIIE Chapter was the first such chapter established at a school offering degrees in Engineering Technology. All students are encouraged to join. Stop by the IET office (room 217) or see Professor Aft or Professor Young in the IET department for membership information.

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## STINGERS

from de Caux

The only student to solve Stinger 8 has written that he has so far been unable to solve the general problem of which number 8 was a special case. Can anyone help him?

In general the problem runs as follows: All three sides of a flat triangular field are of equal length and from some point in the field you know the distances to the three corners of the field, say A, B and C. Find a formula in terms of these three numbers which will give the perimeter of the field, no matter where the point is in the field! Good luck!

Solutions may be left in my mailbox in the Mathematics Department office or dropped by 256b.

**EXPERTS, cont.**

(FROM P.5)

QUESTION: There doesn't seem to be any problem at all with nuclear wastes. How can you explain the public and media perception of what is really an imagined danger?

ANSWER: Well, first, the nuclear industry has done very little in public relations. Spokesmen often have the attitude that reporters are just below their dignity and don't deserve the real attention of the industry. This has had a very adverse affect, coupled with the fact that these people coming out against nuclear energy are not dummies. Never underestimate their power to tell someone that the danger, real or imagined, is there. I must admire their methods; they are very effective and they've caught the media's attention.

I think the first real indication of public opinion was the Maine referendum about two weeks ago. It was a straight shot; "Do we want to maintain the operation of this reactor, which supplies one-third of our state's power, or do you want to shut it down." The pro-nuclear people saw this as an economic issue, the anti-nuke people saw it as an environmental problem. Environmentally, nuclear waste poses no problem. In fact, the discharge from a nuclear power plant is a lot less, environmental impact wise, than from a regular power plant. There are many facets to the environmental impact. Thermally, all power plants, whether coal, gas, or nuclear, discharge approximately 60% of the heat energy produced. It's discharged into the atmosphere and that's simply the laws of thermodynamics, you can't fight that.

Let's talk about radiation then. It turns out that the radiation coming off of a coal plant is much in excess of a nuclear power plant. This is just due to the fact that coal has a lot of radioactive materials, specifically thorium. Thorium is one of four highly radioactive, long-life isotopes that presents more of a problem as far as gross radioactivity from a coal-burning plant than you would ever get out of a nuclear plant. Another thing is what I just read in the newspaper the other day; they reported that they found a nuclear plant that released .0038 millirems of radiation. Well, what does this mean? As a reference point, everybody will receive approximately 120-140 millirems per year. An x-ray is about 20 millirems. If you coughed hard, .0038 is about the amount of radiation you'd get from your lungs; or about the same as you'd get from this (concrete block) wall, because these walls are full of potassium 40. From a normally operated power plant the radiation is only about .01 millirems per year. That's an idea of the size of the radiation "problem" from a nuclear power plant.

QUESTION: Under normal conditions, then, no nuclear plant poses any serious danger. What about when a nuclear plant has problems?

ANSWER: For that question we can speak specifically about Three Mile Island. Everyone agrees that was the most severe test to date of a commercial nuclear power plant. Let me tell you a story about the level of radiation released at TMI. There was on-line monitoring there from the start. These monitors were brought to Congress, along with the monitoring scientists, to the hearings conducted by Frank Church. Now these monitors were set up, with the team seated behind, in the large capitol rotunda to accommodate the TV crews and newspeople. This, of course, was an impressive array of machines and Senator Church asked if one could be turned on and wanted to know how they worked. The monitor immediately began clicking and measuring radioactivity. Senator Church asked what was happening and was told by the spokesman that the monitor was measuring the radiation they were receiving at that moment. Senator Church asked the scientist to put this in relation to the radiation released at TMI. After a few calculations on a scratch pad, the spokesman, on national TV, said, "We are now receiving about 40 times the radiation from this granite building as you would be if you were clinging to the fence around TMI." Well, that gives you an indication of the actual situation at TMI.

QUESTION: How come the big scare then? Is there a possibility of a nuclear explosion? Was Three Mile Island a fluke or can something worse happen?

ANSWER: Well, the public relations people blew it. The people around TMI were justifiably concerned, as any of us would be, but the different company spokesmen were telling conflicting information and just never got their act together. That was inexcusable, because the papers got on it and gave the impression that people were being lied to. The results of course were a real setback for the nuclear industry. It's been hard ever since to regain any public support until the Maine referendum.

Is there a possibility of a nuclear explosion in a power plant? Absolutely not; and this is one of the rare times you'll ever here a nuclear engineer say that. Is there a probability of another incident like TMI? Sure, there is a possibility, but the chances are about the same as any accident. The element of human error is there and who can say that it won't occur again. The thing that impressed me about TMI was that just about every mistake that could be made, was made. After repeated goof-ups by the operators, the safety systems still worked. Even when they

were overridden, they worked. There was no massive release of radiation. There are still problems that will have to be dealt with for a long time, but TMI worked like it was designed to.

QUESTION: What about the chances of sabotage?

ANSWER: Sabotage is of course a possibility, because of the growing sophistication of extremists, but there is no possibility that they could use the radiation of the plant as a weapon. The most they could do would be to disrupt the production of electricity. Let me tell you about the containment building of a GE Mark 6 plant, for example. This containment building is made to withstand the impact of a jetliner; they are pretty substantial, to say the least, but the possibility of sabotage is certainly there.

QUESTION: Should the federal government have more control over the nuclear industry or take a larger role in the economic support of research and development?

ANSWER: The government already has the largest role in economic support, in underwriting research and development. That is a function of the Energy Research and Development Agency. ERDA is responsible for distribution of grants and is by far and away the largest source of money for research. I don't think the federal government should take control of the nuclear industry. It may turn out that is one of the only answers to get away from the state referendum thing. I would imagine that someone, somewhere in government, has thought of the feasibility of a federal controlled nuclear program. The plants would be run like a military operation, using military personnel to run the operation and not have to worry about local government interference in building another plant. I don't think that will ever happen but I'm sure someone has considered it.

QUESTION: What is your opinion about the future use of fusion power to create electricity?

ANSWER: Nuclear fusion is a viable concept, but I think that, contrary to what science magazines promote, the use of nuclear fusion power before the year 2,000 is pure science fiction. There are a lot of pluses for nuclear fusion as a source of power. However there are such trivial items as how you get 14 MEV, which is what is produced by a deuterium-tritium reaction; out of a 14 MEV neutron which by definition is a neutral particle; it creates no reaction unless it crashes into the neutron of another atom. Physically this presents as much of a problem as trying to hit a golf ball with a baseball bat while you're standing five miles away. Fusion is a very attractive concept and good progress and research is still going on, but I don't think we'll see a working fusion reactor for a very long time.

## Titan II

(FROM P.6)

and I believe that we must begin a comprehensive overview of the situation and possible alternatives that may be suggested."

The Titan II's have a liquid fuel system, unlike their predecessors, the Titan I's and the Minuteman missiles. It's fuel ignites instantaneously on contact with an oxidizer. Because of this feature, no ignitic system is needed and the fuel tank can be kept at room temperature, allowing the Titan II to remain fully loaded and ready for launch. The fuel system is corrosive and vulnerable to leaks. The Air Force reported that there have been about 125 leaks between 1975 and 1979 that were serious enough to result in the missile to be emptied and taken off duty.

The most deadly accident occurred in August 1965. A welder's torch ignited a fuel hose: 53 civilian members of a construction crew working at the site near Searcy, Ark. were killed. A leak in 1978 in Rock, Kan., killed two Air Force personnel and injured 29 others. In April there was another leak near Wichita that forced an evacuation in a three mile radius.

The explosion at the Damascus silo was insufficient to set off the atomic warhead of the Titan. Only a carefully orchestrated series of events can trigger the detonation. The "fail safe" design does not preclude the possibility of radioactive leak; however, in 1966, a B-52 bomber and KC-165 tanker collided over Palomares, Spain. Two of the four bombs fell and dispersed radioactive debris over the region. Fortunately, at Damascus, the warhead, which was thrown skyward, present no such danger.

The U.S. stopped purchasing Titan II's in 1967. Flight testing was stopped in 1969 because the Titan's in reserve were running out. The missile was scheduled for retirement in 1971 however, they have remained operational partly because it is hoped they can be used as bargaining chips in arms limitation talks.

"The Titans still serve a useful deterrent purpose," said President Carter. "But we have been aware that they are older missiles and in the normal evolutionary process, they will be replaced."

Greg Wagstaff

## Parallax

(FROM P.5)

11) I do not feel that nuclear energy is a vital energy source for America, and it is potentially dangerous.

Mark Hayes.

12) Nuclear energy is a question often asked in our society. A coal powered plant takes 100 railroad car loads of raw materials a day to keep it operating. A nuclear plant takes 1 railroad carload of raw materials per year. Which would you rather pay for?

It has been shown through numerous studies that more radiation is received from an ordinary television set and the sun than if a nuclear plant were a few

16) Nuclear energy is very safe. The problems that we are having with excepting nuclear energy come from anti-nukes and media-hype (scare tactics). If these people were around when the wheel was invented and had their way, then we should all be flying kites.

T. R. Jones

17) Although I don't know enough about nuclear energy, I believe that it is vital to society as an alternative energy source. Until more study can be done on solar energy, we need to increase the quality of training for nuclear employees.

Betty Hollifield

18) Nuclear energy is one of the most efficient and clean forms of energy that is now in use in our country. Also, with all the safety regulations that are placed on nuclear energy it is probably one of the safest. I vote yes to nuclear energy as an alternative energy source.

Charles Moody

19) I believe nuclear energy is our best energy source in the long run. We should, however, make some improvements in our current nuclear waste disposal systems.

Russ Paulk

20) I believe that in a country which has as many safe energy alternatives as does the U.S., nuclear energy is too risky an endeavor to uphold. Coal, solar power, sea, conventional hydroelectric are all better and safer ways to produce power than nuclear reactions.

Tony Leverett

compiled by Terry W. Drayton

## Maine Yankee

(FROM P.4)

company did not receive contracts for guided missile frigates or destroyers, Bath Iron Works would close, and unemployment in southern Maine would double.

So on September 23, amidst billboards asking for NO votes and pamphlets and bumper stickers asking for the YES vote to close Maine Yankee, voters went to the polls--and spared the plant from shutdown.

Yet the story certainly does not stop here. The referendum received national attention, and if the old saying ("As Maine goes, so goes the nation"), is at all true, the attempt to close nuclear plants by referendum or state bill may be repeated across the nation.

Steve Cantrell

## Prez

(FROM P.3)

ed as a profession, our own graduate programs, that is, advance work in our own discipline. As an engineering technology school we depend on another profession--engineering--to supply our teachers and educators. At some point I would like to see a graduate program for engineering technologists, if for no other reason, just to train our own future leaders and teachers.

QUESTION: What improvements would you like to see in our continuing education department?

ANSWER: We just need to do more offer more, make it more accessible. There is a lot of continuing education going on campus such as short courses, night school, seminars, but I don't think we've begun to put the priority on it that we can, even with our limited resources. Statistically, we're going to be forced to enlarge our continuing education program in the next ten years because the middle-career population (30 - 45 yrs.) is going to double during that time. That has real implications in terms of mid-career retraining and updating of a technical education. We will have the challenge set before us and I hope we can put a higher priority on continuing education to meet that challenge.

QUESTION: Do you see any general changes in our campus during this school year?

ANSWER: Well, one change has already taken place. We are bigger now than ever before--over 2,600 students now, which creates some advantages and disadvantages as we try to serve the needs of those students. As you know, we have hired an intramural athletic director and a new student counselor, both of whom will improve student life here on campus. We will be implementing this year a new organizational structure for the college, in terms of administration. This is because of our new status as an independent school which requires a new setup as opposed to being a subset of another school. We're going to be working closely with the Foundation and alumni to improve programs to raise funds and increase donations to the school. Over the next year, I'm sure we'll see changes in the different curriculums and we'll continue to see our inter-collegiate athletic program improve and hopefully this will mean better attendance at games.

I want to say, in closing, that we are a student oriented college, that's the advantage of a small college. Faculty in engineering technology are more open and more accessible to students because they tend to view themselves as industry people rather than academicians. This approach is very healthy and I can only see a bigger and better institution coming out of it.



## ENGINEERS/COMPUTER SCIENCE GRADUATES

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