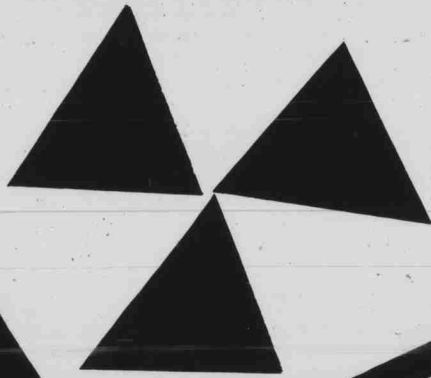


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atomic age
issue

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"... it is conceivable that extremely
powerful bombs may thus be
constructed..."
— A. Einstein

News

History of nuclear weapons provides insight

Joe Galarneau
News Writer

"The existence of free nations, free men and freedom itself is endangered by an aggressively malignant philosophy backed by great material power and organized in monolithic dictatorship. (The free nations) are opposed on a world-wide front, including the home front, by a ruthless, resourceful and determined enemy utilizing every conceivable means, short of direct overt armed combat, to accomplish its aggressive ends." — Fundamental Common Objectives

This excerpt from **Fundamental Common Objectives**, produced by the State Department in 1948, provided the political basis for Plan Dropshot, prepared by the Joint Chiefs of Staff in 1949. The three-volume document has the dubious distinction of being the first American warplan to include nuclear weapons on a widespread scale.

The introduction of the nuclear weapons into warfare occurred on August 6, 1945 when the atomic bomb was dropped on Hiroshima, Japan. Some argue that America did not need to use the bomb.

"Army intelligence reports said in August of 1945 that if the U.S. did nothing but sit there, Japan would fall within the next month or two," Joseph Caddell, a visiting assistant professor of history and a fellow at the Triangle Universities

Security Seminar at UNC-Chapel Hill, said.

"We wouldn't have needed to invade, anyway," Caddell continued. "The country was going to collapse."

The damage done in the bombings was large but not as big as some other World War II air raids.

"We killed more people in Tokyo, Hamburg, and Dresden than we did in Hiroshima and Nagasaki," Caddell said.

"We may have killed as many as a third of a million people in Dresden in three days. The impact of Hiroshima and Nagasaki was that it only took two bombs."

The real purpose of using nuclear weapons in World War II, some believe, was to keep the balance of power in check.

"We wanted to keep the Soviets from taking over a good portion of the Far East and we also wanted to impress them," commented Caddell.

"After all, we chose two cities that we'd actually been saving to use as test targets."

Soon after the bombings, the military potential of this new weapon was first realized. "The Air Force believed that they were going to change the face of warfare because of the atomic bomb," Caddell said.

"The Air Force said, 'What are you going to do, fight the Russians soldier for soldier? Does the United States really want to or can we maintain an army big enough to fight the Russian army?'

"We can balance the Red Army using nuclear

weapons.' That seemed to be our philosophy."

Also, nuclear weapons appeared to be more cost feasible. "(At that time) an atomic bomb cost about as much as a tank. You obviously get a lot more bang for your buck out of a bomb than out of a tank. Plus, the American public liked the idea."

Others, including the Army and Navy, weren't quite that sure. Military leaders in 1947 questioned the feasibility and power of nuclear weapons. Two questions were raised, Caddell said.

"First of all, are nuclear weapons really all that powerful? We didn't have a lot of test results to begin with."

"Trinity, Hiroshima and Nagasaki were all that we had. Skeptics even said that Japanese cities are made out of wood and paper and that they're easy to blow down."

The second and more realistic questions advanced by the Navy was the availability of fissionable material such as uranium and plutonium, Caddell said. This would limit the number of bombs. Soon, these questions were put to rest through tests and studies.

Caddell believes that the Navy was originally such a cynic about nuclear weapons because it was trying to limit the power of the emerging Air Force.

A number of incidents led to the drafting of Dropshot, according to Caddell. The Soviet

(See 'U.S.', page 9)

State alumnus works to build better bombs

Joe Galarneau
News Writer

Nuclear weapons, like any other kind of weapon, have to be designed and tested before they are actually deployed.

At Lawrence Livermore National Laboratory, one of the two main design and testing centers in the country, State alumni John White performs complex computer simulations of nuclear explosions in order to build better bombs.

White came to State in the mid 1960s and pursued a master's degree in applied physics.

"The department of nuclear engineering was just being formed at that time," White explained in a telephone interview from his Livermore, Calif., computer laboratory.

"My thesis was actually a nuclear engineering thesis but it was (created) through the physics department," White further explained.

After graduating from State in 1966, White traveled to the University of California at Davis to earn a Ph.D. in applied science.

The program White participated in was

designed by Edward Teller, a member of the Manhattan Project and the father of the hydrogen bomb, to train scientists for careers in nuclear weapons fields.

"I'm currently an applied scientist in the nuclear weapons section," White said.

"I perform computer simulations dealing with and analyze results from nuclear experiments."

After obtaining his degree, White worked in the geoscience section at Lawrence Livermore Laboratory. His work concerned Project Plowshare.

"The Plowshare program was using nuclear explosions for civil engineering application such as digging canals through an isthmus or breaking up tight rock formations in order to release natural gas and oil," he explained.

After a few years, however, research stopped on the Plowshare project.

"The project ran out of funding at the federal level because of the anti-nuclear movement. Everybody was afraid of nuclear reactors," he said.

"Well, they're even more afraid of nuclear explosives."

Although Plowshare was not used in the Western World, the Soviet Union has developed the technology.

"The Soviets have used it for quite a lot of civil engineering applications," White said. "Most of their work has been digging canals."

White uses a Cray XMP supercomputer, one of the most powerful computers ever built, for calculations that involve up to 800 million instructions a second.

"If you're the kind of person who gets bored easily, this work has the multi-faceted aspects that to me are fascinating," White said in the August 1985 issue of *Discover* magazine.

White's philosophy regarding the seriousness of the subject of his work is not unique.

"I have the same qualms about nuclear weapons that anyone else has about them... they are a very dangerous thing."

White believes that the existence of nuclear weapons is acceptable when they are used to keep peace and maintain a balance of power.

"If we need to have nuclear weapons, then it is all right to work on them," White concluded.



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"In some sort of crude sense which no vulgarity, no humor, no overstatements can quite extinguish, the physicists have known sin; and this is a knowledge they cannot lose."

— J. Robert
Oppenheimer

Ribbon promotes peace, brings people together

WASHINGTON, D.C. — The project is called "The Ribbon" and its purpose, at the least significant level, was to wrap the Pentagon, the Lincoln Memorial and everything in between (i.e., the Capitol) in ribbon.

Ribbon also refers to the rectangular panels of painted, embroidered or emblazoned cloth that, tied together, made up the big "ribbon" that did all the wrapping.

We began our journey to Washington sometime around 5 a.m. Sunday, August 4. None of us had slept, we had a flat tire on the way and we had to change drivers three times, but who's counting.

We got to D.C. around 10 a.m. and woke up our Washington correspondent, Janelle Simmons. She came to the door, wrapped in a sheet and complaining of a terrible hangover.

Breakfast at Trio, a Washington tradition, while church bells rang from Dupont Circle to 14th Street. As we drove through town, it didn't look like anything was happening, a regular Sunday. There were a lot of families out pushing strollers and eating ice cream. We parked; a brief trudge from the Lincoln Memorial and walked across the polo field, following a Joan Baez-like voice singing somewhere beyond us.

People in yellow shirts were directing other people to booths with delegations from each state. It was here that you picked up a piece of ribbon. We found North Carolina, but North Carolina delegates had set out early to form the first part of the chain.

DANA KLETTER
Washington Bureau

We went to the Ohio delegation; plenty of ribbon in Ohio. Janelle got a panel painted by an order of nuns in Akron. Its theme was justice and it was beautifully colored and lettered. Mine was done by a school child, it had starfishes and sand dollars stuck on it and read, "All Life Forms Are Sacred."

*"It was perhaps
the most fitting of
protests; the
most convincing
of arguments."*

After receiving a panel, people walked on either side of the reflecting pool or sat under a tree until someone walked up and asked "Do you want to tie?" Then they were off, they were committed, tied to more people who were tied to even more people.

Janelle and I stood between a boy from Minnesota and an older man from Florida. People became tied at a furious rate.

A cheer went up further down the line — the Pentagon had been tied. Some-

one said they were tying close to the Capitol. That news produced a vague, if remote, exhilaration. It was hard to think, "Here I am, standing out in the sun, holding up this panel, chatting with strangers, connected by way of several thousand human beings to someone standing under the sun, holding a panel, fifteen miles away."

There was a distinct day-in-the-park feel about things, gently festive, very pastoral. "Lovely," a passerby said, looking at Janelle's piece of ribbon. It was lovely... everything was lovely.

In the face of the darkness and emptiness of annihilation, what was all this loveliness? It was perhaps the most fitting of protests; the most convincing of arguments. It was an extolling of our virtues.

Here, under the blue summer sky, our grace was apparent, our children were beautiful, our intentions were wholesome. Perhaps something as elusive as that loveliness will be reason enough for us to vindicate ourselves.

When the chain was completed, balloons were launched to signal the union. We were then instructed to untie ourselves and hand in our banners.

The end seemed to have come prematurely, people were reluctant to break the chain. Predictable things happened: we lost our car, we lost the people we came with. But it did not escape any of us that, briefly, we came together. It remains that we were all briefly connected... tied to each other by a ribbon of peace.



Justine Merritt

Ribbon creation of hope

In 1982 Colorado grandmother and former Chicago schoolteacher, Justine Merritt, visited the Peace Park memorial dedicated to the victims of the first atomic bomb in the Japanese city of Hiroshima. Merritt, touched by the memorial, began embroidering onto a piece of cloth the names of family and friends who would be lost in a nuclear holocaust.

Friends began their own projects and Merritt envisioned joining similar panels of art in a ribbon around the Pentagon to commemorate the 40th anniversary of the dropping of the atomic bomb.

"She (Merritt) sent a Christmas card to me about three years ago telling me about this idea she had," Chapel Hill resident and friend, Lori Eichel, said.

"I thought that it was a great idea but I didn't think it was very feasible."

On August 4, over 23,000 people joined a ribbon of panels that spanned over 15 miles around the Pentagon, the Washington and Lincoln Memorials and the Capitol Building in the realization of Merritt's dream.

The Center for New Creation, an Arlington, Va. peacemaking cooperative, served as the headquarters for the complex project.

"We have been overwhelmed," New Creation volunteer Jane Stewart said. "Public response has just been tremendous. We spread the word asking people to make ribbon panels in everything from church and peace group newsletters to articles in *People* magazine."

"People keep hearing about the ribbon and calling to find out if it's too late to make a panel to add to it. We have received panels from all 50 states and several foreign countries — the Soviet Union has sent over 130 ft. of panels," she continued.



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Justine Merritt
Denver, February 1982

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Features

LEGS LEGS

After a month of leggy preliminaries, the contest was narrowed to 24 pairs of feet connected to calves, knees and thighs vying for the title of Lovely Legs. The Bear's Den was packed last Wednesday night for the finals of the contest, which saw the winner walk away with a \$500 grand prize and the honor of having the best gams in the area.

Sponsored by WKNC, Spa Health Club, Powerhouse Fitness and The Bear's Den, lovely leg watchers grabbed an eye full as male and female contestants strutted their proverbial stuff.

Taking third place in the more masculine part of the show was Stuart Williams, who won a three-month membership to Powerhouse Fitness. Barry Smith won two one-month memberships to Spa Health Club. The winner of the title of best male legs and \$500 was Rusty Krestz.

On the female side of things, a three-month membership to Powerhouse Fitness went to Sherry Rossy. Brenda Babyak was a two-points-from-first second place winner, being awarded a three-month membership to Spa Health Club. First place and \$500 went to Robin Pursley, Queen of the Loveliest Legs.

Tongues wagged and eyes popped throughout the show as each contestant attempted to out-show the previous person before the expert panel of judges. Trying to keep the hungry audience at bay were WKNC air-personalities Crystal Bartlett and Steve Shannon, who co-emceed the show. Bartlett's screams of the males: "I wish I had a swing like that in my backyard!" and Shannon's comments of the ladies: "Don't see no cottage cheese eaters here!" spurred the crowd on instead of keeping their libidos at a cooler rate.

In all the evening was a rousing fund-raising success for WKNC, with plenty of legs, and other bodily parts, to go around for the crazy guys and gals.

Staff photo by Rod Rogers



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Students aid area businesses in making computer decisions

Natalie Eason Hampton
NCSU Information Services

When a Raleigh advertising agency decided to automate its operation with computers, executives found themselves confused by a myriad of proposals from sales representatives.

With the help of some computer science students from State, agency employees were able to examine all the systems and select one best suited for their needs.

The students earned academic credit for their efforts through a practicum course, one of two courses in management information systems taught by Tom L. Honeycutt, State associate professor of computer science. The two-year-old practicum course, which was judged excellent in a recent review by a team of computer professionals, gives senior computer science majors a chance to try their hands at some real-world systems analysis problems.

"We're trying, through

this sequence of courses, to give the students a better idea of what is needed by the (computer) user," Honeycutt said.

Classes are divided into teams of about three students, with each team responsible for assisting a local business or organization with computer problems. Although the students cannot guarantee success, they offer businesses a chance to get recommendations on computer systems, Honeycutt said.

Businesses served by the class have included an aquarium shop, a legal firm, a delivery service and an art dealer, as well as several large high-technology firms in Raleigh and the Research Triangle Park. Two State organizations — the North Carolina Japan Center and the School of Textiles — have been served by the students.

Because of the expense and time involved in travel, clients usually are limited to the Triangle area.

(See 'Business,' page 5)

Businesses get student advice

(Continued from page 4)

The students' projects have been varied. One group recommended a plan to help a Research Triangle Park firm automate an inventory cycle count system that was partially computerized and partially manual, while another group worked with a telecommunications company on a new method of developing custom computer systems called phototyping. Phototyping allows systems developers to create a shell of a system for a user, then modify it to fit the user's needs.

Honeycutt believes students who complete the project course will require less professional training from the companies that hire them. Students learn how to work in teams on systems analysis problems, which generally are handled by teams in the workplace, he said. Each project team is advised to select a leader, a position which may be rotated to other group members during the semester. Some students serve as project managers, supervising three to four team projects and reporting to the instructor.

Roughly eight to 20 computer professionals visit the class each semester as guest lecturers. Last semester an IBM employee spent two hours each week in Honeycutt's classroom serving as a consultant for organization, ethics and project plans.

A team of industry executives reviews the teams' mid-term project reports. And professionals help judge students' final in-class project presentations on content and mode of presentation.

With the course becoming more popular each semester, Honeycutt would like to see industry play a larger role in developing the management information systems curriculum. For example, companies could help by allowing computer professionals half time off to teach one semester at State, he said.

Industries profit from participating in the program by providing educational experiences for students who may later work for them, Honeycutt said.

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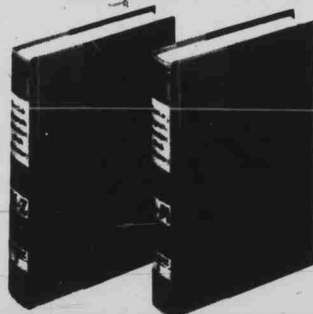
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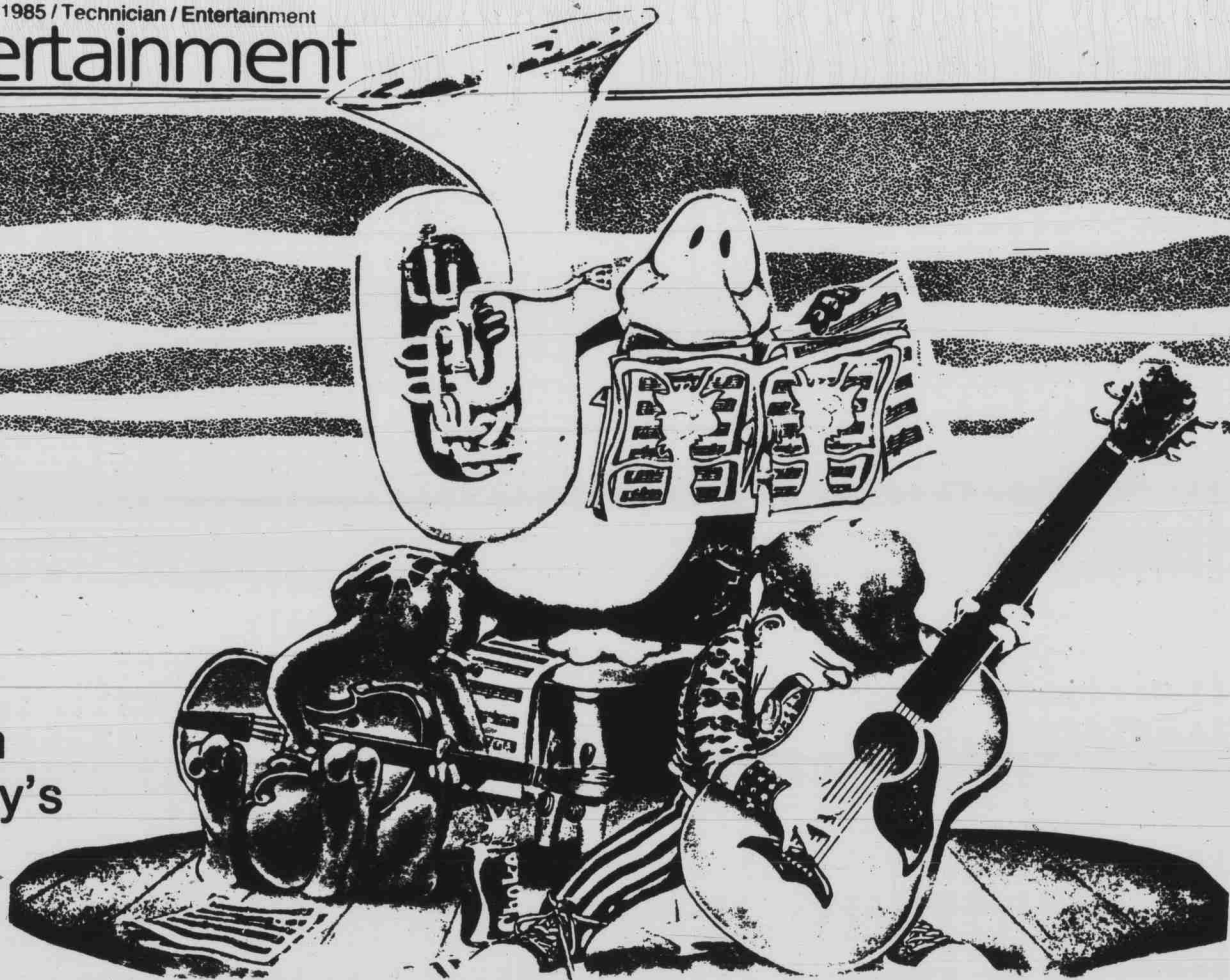


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Bloom
County's

BERKE BREATHED

by Joe Corey

Berke Breathed has become one of the biggest cartoonists in America with his comic strip Bloom County. His comic strip, originally carried in only 27 newspapers in 1980, is now appearing in 6,700 newspapers all around the world. He also has three best-selling anthologies of his cartoons: *Loose Tails*, *Toons for Our Times*, and his most recent release, *Penguin Dreams and Stranger Things*; and a stuffed animal, Opus the Penguin. Recently when I spoke with Berke Breathed over the phone he had just finished drawing 28 new Bloom County strips for this month.

He published his first cartoons in the University of Texas student newspaper under the title *Academia Waltz* which Berke described as "nothing like Bloom County" as it contained more college humor. He also added that there are no plans to release a *Best of Academia Waltz* book.

Berke for the most part doesn't read other people's comic strips and was never a comic strip reader when he was young. Even the two newspapers he buys, *New York Times* and *USA Today*, do not carry comic pages.

When Bloom County first appeared, Milo Bloom was the main character, but now Berke tries to vary the characters around so no single personality can dominate the strip and turn the strip into a single dimensional strip.

When it came to discussions about the individual characters of the strip, Berke replied, "As far as analyzing my characters is concerned, I'm moot on that. I think it takes a lot of fun out of it. So I won't comment on what they'll be doing or how they evolved."

However, Berke did mention that he based no character on a sole individual. Gary Trudeau (*Doonesbury*) did base his character Duke on the life and adventures of gonzo journalist Dr. Hunter S. Thompson. When Hunter was asked what he thought of Trudeau he replied, "If I ever get my hands on the bastard, I'll rip his lungs out!" Breathed said that nobody has given him that type of response yet and even the people he pokes fun at are delighted.

Many readers have noted the lack of a regular female character in the strip with the disappearances of Bobbi Harlow and Yaz Pistachio,

but Berke said that he's working on a new female character that should appear in the near future.

A few years ago Breathed was going to quit the strip because his syndicate had licensed Arby's to do Bloom County drinking glasses. In the end Arby's didn't market the glasses and Breathed got the right to determine what products would get licensed. At the moment the Bloom County line of merchandise consists of T-shirts, books and Opus dolls. Berke designed the stuffed Opus dolls for two reasons. The first reason was because he wanted one and the second reason was that it is a good way for people to relate to their comic strip, but he added that "you'll never see an Opus toothbrush."

He had some strong words for strips that over-indulge in merchandising when he said, "If you're going to merchandise like Peanuts, your comic strip better be able to back it up with an awful lot of genuine worth. I use that word in a very nebulous way and I don't want to define it any closer. Peanuts, especially in its hey days, was truly a work of comic genius, because it was working on several different

levels. The situations, the relationships, and the thematic ideas that Charles Shultz came up with were truly original and ground breaking. They were very funny and tremendously humorous. I think 'that' could support what many of us refer to as tacky merchandising. If you don't have that, I think the appeal gets lost right away. I think some of the comic strips had better be careful because I don't think they can support the merchandise with humility. Peanuts has 2,000 pieces of merchandise and Garfield has over 3,000 that brings in 20 to 30 million dollars a year. I definitely draw the line between tasteful merchandise, which should always be a part of a comic strip, and pencil sharpeners."

His advice for college cartoonists was, "Try to get published frequently, try to build an audience, which should never be taken for granted, for a loyal audience is a great asset, and to get as much experience as you can for working at a college paper is an invaluable experience." He added that he enjoyed cartooning for his college paper "more than he does now."

Berke is strongly opposed

to the placing of cartoon strips on the editorial page and described any newspaper putting his strip on the page would have a disastrous effect on the strip. "Somewhere along the way," said Breathed, "somebody got the idea that comic strips were meant to be simple-minded. They forgot the long history of comics. The intellectualism of comics years ago was much more prevalent in their style and for reasons too complicated to tell, the comic's page is not that way and a few of us would like to get it back to a more literate level. That doesn't necessarily mean opinion wise, but the idea that the minute you state an idea or have words with 4 or 5 syllables in it that it should be put on the opinion page is absurd. The comic page is a form of ideas and humor and there is no reason that everything should be like Garfield. And the idea of putting strips on the editorial page is an absolute absurdity. Just because they expose opinions, like *Doonesbury*, so what? Where is it written that comics have to refrain from opinions? They've always had opinions."

(See 'Bloom's,' page 13)

The big 'bye-bye'

Final summer issue calls for reflection

I can't believe it's over. Summer has once again flown by and fall is approaching rapidly. It's been fun.

Shot *The White Animals* and *The Producers*.



And I almost interviewed HBO's *Not Necessarily News* and NBC's *Saturday Night Live* star Rich Hall. I met him though.



to bear the sorrow, but I must return to my normal job as Editor-in-Chief of the official State yearbook, *Agromeck*. Yes. We have a yearbook. Don't get smart with me buster. I know where you live. I have connections.

page layouts and covers), Fred Woolard (nothing in particular), Joe Corey (helping me fill the pages with additional B.S.), Lisa Vogel (yogurt and personals), Bill Ridenhour (not getting in my way) and Matt Kelley (WKNC Assistant Program Director for keeping me out past my bedtime and at Mitch's).

I hope you have enjoyed the silliness we have thrown out at you this summer. It's been a pleasure being at your reading service for these past three months or so. Thanks for paying attention.

In all, I want to thank all persons involved with *Technician* this summer and beyond for everything. As I bid farewell to the crazy, mixed-up world of that nutty past-time I like to call newspaper journalism. It's back to the toil of yearbooks and free steak dinners with portrait representatives day in and day out. Ho-hum.

To my fellow staff members: Don't forget to eat your veggies, brush teeth before bed and don't drink the water. Thanks to you all: John Austin (for making me do my work), Dennis Draughon (for the help on

Goodnight and have a pleasant tomorrow.

ROGER W. WINSTEAD

Entertainment Editor

A lot has happened since the first summer issue when I promised fun and excitement—"time again to have fun in this wickedly silly season we call summer." I have goose-pimples just thinking about the fun we had. Fun, fun, fun. It's just too much to comprehend.

Persopally, it's been an experience. Here are a few things I did in the Summer of '85:

Played ping-pong with Phil Collins.

Covered the North Carolina Concert for African Relief.



Reviewed movies:
-*Silverado*
-*Back to the Future*
-*Mad Max Beyond Thunderdome*
-*Cocoon*
-*Prizzi's Honor*



Visited an old girlfriend in Northern California for a week, seeing the entertainment values of San Francisco and San Rafael.



Reviewed albums:
-Suzanne Vega
-U2
-Meat Loaf
-Men at Work
-'til tuesday
Met Michael Stipe of R.E.M.

Lived at Atlantic beach for three weeks.



-Talked with "folk singer" Suzanne Vega.



staff photos
by Roger W. Winstead

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Science and Technology

Physicist recalls thunder

Shishir Shonek
Science and Technology Editor

State physicist Worth Seagondollar first learned about the United States' effort to build the first nuclear weapon (called the Manhattan Project) while working as a graduate student at the University of Wisconsin.

Research for the project was being conducted on equipment that he used. "I wasn't supposed to know what was going on," Seagondollar said, "but after a certain period of time, I had a pretty good idea of what was happening."

Similar research was being conducted in other universities, including Princeton and Rice Institute. Thus, for better security, the people and equipment involved in the various projects were brought together in late 1942. The selected location was a small, abandoned boys' school in Los Alamos, New Mexico, about forty miles north of Santa Fe.

Seagondollar was invited to join the group, which he did in spring of 1944. "In those days," said Seagondollar, "you were either doing something that was directly contributable to the war effort or your draft board gave you government employment."

"In those days, it was well known, it was proven that the Germans were working on the splitting of the uranium atom, the so called 'fission' process, to produce a weapon. The Manhattan Project was the United States' effort along those lines. The feeling was that if the Germans had such a weapon, and the Allies did not, they would win the war quite quickly. The estimate was that they were a year-and-a-half ahead of us."

Seagondollar was part of a three-man team that calculated a quantity called the critical mass. For each radioactive material, a minimum amount of material is necessary to produce a reaction. If there was too little material, the bomb would "fizzle." If there was too much, there would be a premature explosion, possibly even in the laboratory.

However, with the proper amount of material, the bomb could be conveniently detonated with conventional explosives. The group that Seagondollar worked with calculated the first critical mass of plutonium.

"We measured all the way up to 98 percent of the critical mass," said Seagondollar. "Then they took the plutonium out of

our lab, and moved it to a canyon nearby. The thought was that if something went wrong, if you did get over 100 percent of the critical mass together and the plutonium did detonate, well hopefully the canyon would funnel the explosion upwards."

The first nuclear detonation took place near the town of Alamogordo, 300 miles south of Los Alamos, at the U.S. Army Air Force bombing range. The plutonium device was set upon a 100-foot high steel oil rig. Teams had been setting up instruments for about five miles around the tower, to measure radiation, blast force and other quantities.

"It so happened that the guy who was the head of our group at Los Alamos had gone down to Alamogordo," said Seagondollar, "and was second-in-charge of the outdoor laboratory there. We made him promise that he'd get as many of us down there as possible."

"About a week before the test, we got a call from him. He needed five people for exceedingly dirty jobs, if we were foolish enough to want to come. We drew straws, and I was one of the five that got to go down."

"There were about 300 people there, I was told. They tried to keep the group as small as



Staff photo by Fred Woolard

As a graduate student, physicist Worth Seagondollar conducted research at Los Alamos, New Mexico, as part of the Manhattan Project. He was a member of the three-man team that calculated the first critical mass of plutonium.

possible, for secrecy purposes. Boy, it was not an open invitation, believe me. At 10 o'clock the night before, as we were going down a desert track, we were told that we would go through a checkpoint. The checkpoint consisted of a big Air Force searchlight illuminating three men with a tripod-mounted machine gun, sitting in the middle of the road, and they wanted to see our papers."

The day before the detonation, a meeting was held to discuss the different possibilities. The bomb may have fizzled, or it may have been much more powerful than expected, "in which case" said Seagondollar, "you had nothing to worry about, since the cremation ceremonies would be automatic."

The group was not sure of how bright the flash of light would be, so it was recommended that they look in the opposite direction. Then, from the intensity of the reflected light, the scientists would decide whether they wanted to turn around.

"I and my friends got to tape pieces of the blue glass used in arc welder's hoods over holes in big sheets of cardboard, which served as our sunglasses."

Seagondollar was with the main group of scientists, about nine miles from the tower. About four people were in an underground bunker about six miles away.

"What happened was the brightest flash of light I've ever seen, like looking into a photographer's flashbulb. And I was looking in the opposite direction. But a flashbulb is just concentrated in one spot, and this

light was everywhere. I counted 1001, 1002, to 1015 and turned around. My first impression was that I had forgotten the blue glass. There was no trace of blue, it was just pure white out there. I saw the ball of fire form above the valley floor. It just went straight up through the clouds and formed a big mushroom cloud."

The sound wave hit about 45 seconds later. "When the sound hit us, it was like heavy rolling thunder. Not particularly loud, but continuous. You rarely hear thunder that has come for more than a mile, and this noise had come for nine miles."

"The blast was just a poof of air, like someone slamming a door in your face. One of the four was a friend of mine and I asked him if he got knocked down by the blast, because all we felt at nine miles was a gentle poof of air. He said 'Hell no, I saw that light, and I dove back for the doorway.'"

"But the thing that really scared you was that terrific blast of light."

"Afterwards we went to a debriefing session. I don't remember talking to anyone from the time I saw the explosion until the time I talked to that hardboiled sergeant who told me that I hadn't seen anything, and if I said anything about it, I'd get shot."

"When you see something like that, you don't think great thoughts, or at least I didn't. Before I stopped looking, which may have been 45 minutes, I thought I was seeing the end of World War II. I remember that distinct impression: 'This ought to stop it.'"

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Grants not limited to weapons, warfare

Joe Galarneau
News Writers

For many people, the word "science," when mentioned in conjunction with the Department of Defense (DOD), produces images of weapons research or some scientist developing biochemical warfare materials.

While such research may exist, the overwhelming portion of research sponsored by the Armed Forces is much like that sponsored by nonmilitary organizations like the National Science Foundation.

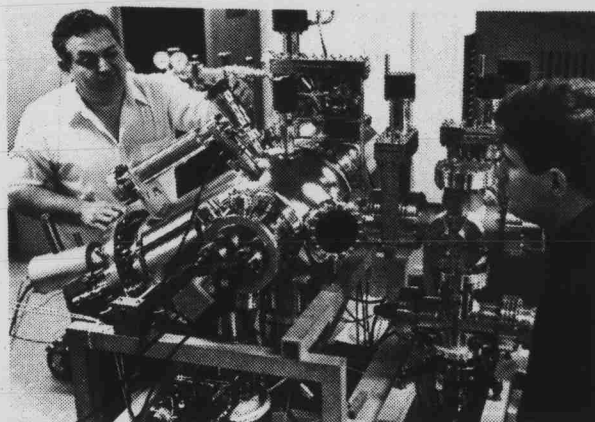
According to Joseph Carbanera, director of university research grants for the Navy, the Office of Naval Research sponsors over \$250 million worth of research in universities alone. The Army and Air Force also give research grants.

"One of the avenues for extending science in the United States is the department of Defense," commented J. F. Schetzina, professor of physics. "For new applications, one needs to support fundamental research. It is this research which leads to the applications of the future."

State scientists utilize these grants to conduct research in many fields. The School of Physical and Mathematical Sciences currently has 18 DOD grants, while the School of Engineering retains 25 grants. Topics of research range from designing a system to protect surfaces from high heat load to finding ways to prevent disruption of integrated circuits by highly charged particles.

DOD grants are certainly desirable, according to a State professor. "I do research for the National Science Foundation, the National Bureau of Standards, and the National Institutes of Health," says William Showers. "but I just can't sell myself to the Defense Department. It's really too bad because they have so much money."

Showers, an assistant professor of marine, earth,



Staff photo by Fred Woolard

State physicist J. F. Schetzina and graduate assistant Karl Harris use a molecular layering system to grow semiconductor material.

and atmospheric sciences, has an Office of Naval Research grant. The grant was part of a program in which the ONR gives money to scientists to buy state-of-the-art instruments.

Showers conducts research on elements such as carbon, oxygen, nitrogen and sulfur in ocean sediments. "If we look at the distribution of these...we can look at the processes that have formed the earth," explained Showers.

"We are presently interacting with twenty-one investigators from Hawaii to Israel. We did a study of the bottom sediments of the Venezuelan basin and linked the sedimentary characteristics with the acoustical properties of the sediments. This is important for sonar in submarines and ships."

Schetzina, J.W. Cook, assistant professor of physics, visiting physicists D.K. Blanks and T.H. Myers, and eight physics students grow films made of mixtures of the elements cadmium, tellurium and manganese.

U.S., U.S.S.R. battle in nuclear arms race

(Continued from page 2)

expansion into Eastern Europe and the Communist takeover of China in the late 1940's sparked the United States' attention to the Soviet threat.

In September, the Soviets had their first atomic bomb. The time, according to Caddell, was ripe.

"The incident that got them to adopt their first (nuclear) plan was the Berlin crisis," Caddell said.

Dropshot detailed a war in 1957 with the Soviets on paper. The choice of 1957 was an arbitrary one. The plan included nuclear, conventional and subversive measures to be taken all over the world.

Dropshot conceded that the Russians could overwhelm the U.S. and its allies in terms of conventional forces.

"The use of atomic weapons in a strategic air campaign against the U.S.S.R. is considered essential to the provision of adequate initial destructive capabilities to that air effort," the Joint Chiefs of Staff wrote in 1949.

The U.S. nuclear development campaign began when the military started on a program of developing vehicles for nuclear weapons. Manner bombers were the military's stronghold until the late 50's.

The Soviets developed heavy bombers as their main line of delivery. They often tried to trick the U.S. into believing they had more

bombers than they actually did.

Currently, according to Caddell, the U.S. is not behind in the nuclear arms race, despite what Pentagon officials would like to have the public believe.

"The United States has more deliverable strategic nuclear warheads than the Soviets do. There's no window of vulnerability unless it's the other way around," Caddell points out.

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Dove Liquid

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65 State athletes among 485 named to ACC honor roll

A total of 485 athletes, including 12 who posted a perfect 4.0 average, have been named to the Atlantic Coast Conference Honor Roll for the 1984-85 academic year.

The honor roll is a listing of those student athletes who participated in at least one of the 19 official conference sports and registered a grade point average of 3.0 or better for the entire school year.

Of those selected for this year's list, 176 have been on the

Honor Roll in previous years. Seven of those are on the list for the fourth time, 43 for the third time and 126 for the second year.

Virginia placed the most athletes on this year's honor roll with 95, followed by Maryland with 71, North Carolina with 70 and Duke with 69. State had 65 athletes honored, followed by Clemson (53), Wake Forest (36) and Georgia Tech (26).

Wolfpack Honor Roll Selectees

Daniel Adams, track; Stacy Bilotta, track; Paul Brim, track; Virginia Bryan, track; Susan Butcher, swimming; Tricia Butcher (2), swimming; Jeff Byrd, football; Joseph Cesari, wrestling; Susan Childers, track; Luke Cicchinelli, soccer; Maya Codelli, swimming; John Connelly (4), wrestling; Craig Cooley (3), football; Susan Corbett, golf; Perry Daum (2), swimming/wrestling; Christine Dekraay, swimming; Tom Eckard, track; Gretchen Elder (2), tennis; Craig Engel (2), swimming; Tim Foster, football.

Terry Gannon, basketball; Joe Gay, golf; Gavin Gaynor, track; Uly Grisetto, golf; Jeff Guinn, soccer; Kurt Habecker, soccer; Patricia Hamilton, tennis; Renee Harbaugh, track; Andrew Herr, track; Kelly Holodick (2), football; Angela Hudson, track; John Hummel, soccer; Wade Jackson, tennis; Holly Kloos, swimming; Kerri Kolehma, tennis; Mark Kovacs, wrestling; Natalie Lew, track.

Robert Maddox, tennis; Larry Maher, swimming; Greg Mathews, football; Eliot McCabe, football; Michael McFadden, swimming; Belinda McKenzie, volleyball; Wendy McLees, track; Marcia Meekins, golf; Patty Metzler, track; Danny Murray, track; Kevin Nesbitt (2), swimming; Kathy Ormsby, track; Adam Pate, football; Pat Piper, track; Art Robinson, golf; Connie Robinson, track; Bryan Rodgers, wrestling; Benton Satterfield, swimming; Kurt Seeber, track; Mark Sigmon (2), baseball; Janet Smith, track; John Spirek, football; Shawn Toffolo, swimming; James Toman (2), baseball; Mark Van Ryne, swimming; Donnell Walton, track; George Welsh, golf; Lori Zuersher, volleyball.

Baseball signs 8

RALEIGH — Five North Carolina natives, including two junior college all-Americans and two all-state prep performers, highlight the list of eight Wolfpack baseball signees.

Greg Briley, a shortstop from Greenville, and Scott Davis, a third baseman from High Point, earned all-America honors last season while leading Louisburg to regional play in the JUCO national tournament. Briley bettered the 400 mark for the season and was named the Eastern Tar Heel Conference's Player-of-the-Year while Davis hit over .350 with 19 home runs.

Tommie Adams and Mark McComas of CAP-8 champion Cary High and Brad Rhodes of Clemmons also join the Pack. Adams, an all-state pitcher, finished with an 11-2 record and along with McComas, a shortstop, earned all Cap-8 honors.

Rhodes is a left-handed pitcher out of North Davidson High where he fashioned a 14-1 record and led the team to the State 3-A finals. Rhodes also fashioned back-to-back no-hitters during the season.

The other Wolfpack signees are pitcher Jeff Hartsock and outfielder Bill Klenoshek, both from Ohio, and New Jersey native Brian Bushwell, also an outfielder.

'Big Joe' ready for '85 season

RALEIGH — Few college football players, if any, will be better prepared for the start of the 1985 season than State's Joe Milinichik.

The mammoth offensive tackle has spent a majority of his "awake" hours this summer in the weight room, on the track or studying a Wolfpack playbook in readying for his senior campaign.

Thus it's little wonder that a physical specimen of Milinichik's stature, especially one with such dedication, would be ignored by the football experts. And he hasn't been, as pre-season selections to *Southern Living's* prestigious all-South team, the *Atlanta Constitution's* Deep South Super II and *Football News's* all-America contingent will attest.

"There is more pressure this season because of the added publicity," says the man considered by many to be a solid candidate for the Outland and Lombardi trophies, awarded annually to the nation's top lineman. "But hopefully, as a senior, you're able to deal with the pressure. There's always the inner drive to go out and fulfill what everyone's been saying. But, with this being my last go-round, I plan to go beyond their expectations."

That's a pretty tall order, but Milinichik is used to doing things in a big way. At 6-5, 302, he has amazed people with his ability to run a 5.0 second 40-yard dash, and dunk a basketball from a flat-footed start.

And one doesn't talk about "Big Joe" without mentioning his tremendous strength. During the Pack's physical testing in spring, Milinichik led the way on the bench press by hoisting 550 pounds. That feat alone should qualify him as the strongest man in college football.

"Joe is by far the strongest ever to come through State," said Wolfpack strength coach David Horning, "probably the strongest in the country."

Said State coach Tom Reed, "Joe is as good as I've been around or seen. Anthony Munoz (of the Cincinnati Bengals) and Marvin Powell (New York Jets) are great, and Joe is in there with them, maybe a notch above."

There are two things in Milinichik's life that keep him balanced against the grind of everyday training and physical punishment — his deep-rooted religious faith and his recent marriage to the former Kathy Anderson of High Point.

"God has blessed me so many ways," he said. "He provided me with the size and ability to play the sport I love, and He allowed me some success. But He also keeps me level-headed by humbling me and, most often, that is in the weight room."

"Kathy's influence keeps me going. She's a steady influence and keeps me out of trouble. Being married is not just 100 percent better than before, but more like 500 or 1,000 percent better."

Milinichik is a native of Macungie, a small mountain town in eastern Pennsylvania. But he is not the first local hero to make it to the big time. Keith Dorney, a former Penn State standout now playing for the Detroit Lions, is on Macungie's football honor roll. Like Milinichik, Dorney is an offensive tackle.

"It's obvious," Milinichik says with a smile, "that Macungie is rapidly becoming one of the country's hotbeds."



Joe Milinichik

Lambiotte, Crichlow, Adams in National Sports Festival

High school basketball star Rex Chapman is considering attending State. Chapman, out of Owensboro, Ky., will be a senior in high school this season. Besides State, the 6-4 guard said his choices were, in alphabetical order, Georgia Tech, Kentucky, Kentucky Wesleyan, Louisville, North Carolina, and Western Kentucky... Wolfpack basketball signee Walker Lambiotte participated in last week's National Sports Festival. Lambiotte played for the East squad, which won the bronze medal by defeating the West team 97-91. Lambiotte had six points in that contest....

Several other Wolfpack athletes to be have been participating in the Sports Festival. Incoming baseball player Tommie Adams of Cary has pitched for the South team, while women's basketball recruit Adrina Crichlow was a member of the gold-medal winning South squad. Crichlow scored only one point in the championship contest, but scored 14 points in an earlier game....

Former Wolfpack football standout Mike Quick has demanded a trade from the



Philadelphia Eagles. Quick wants to have his contract, which has three seasons re-

maining, renegotiated after this season, but new Eagles owner Norman Braman has instituted a team policy against renegotiating contracts. Quick is being fined \$1,000 a day for each day of camp he misses....

The Seattle Supersonics are set to decide sometime early this week on the status of former Wolfpack all-American David Thompson. Thompson, who is battling to come back from a knee injury, will be declared a free agent if the Sonics fail to renew his \$500,000 a year contract....

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a history of asthma. For more information, call Susan Rusch-Behrend at 541-2603 (toll free from Raleigh, Durham, and Chapel Hill).

BLACK MEN AND WOMEN are needed for breathing studies by the Environmental Protection Agency. \$45 plus travel will be paid to healthy non-smokers, age 18-35, who take part in these studies on the UNC-CH campus. Get a free physical exam, and be part of improving the environment. Call 966-1253 (collect from Durham or Raleigh).

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SUMMER \$\$\$! Healthy non-smokers, ages 18-35, are needed for Environmental and health effects studies on the UNC-CH campus. Volunteers will receive \$5 to \$7 per hour plus travel, bonuses, and a free physical. To participate, you must have two or more mornings or afternoons available. For more information, call the EPA Recruitment Office, 966-1253 (collect).

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Female roommate wanted August - May. Nonsmoker, studios. Private room. \$100 per month plus 1/2 utilities. Call 834-2459.

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Crier

All persons interested in lifeguarding during the 1985-86 academic year should attend a scheduling/orientation meeting Thursday, Aug. 22 at Office Bldg., Carmichael Gym (look for signs) at 7:30 pm. Bring class schedule. Call Bob Goldberg, x2487, Room 2044.

SUPPORT GROUP FOR ABUSED WOMEN meets every Wednesday from 7:30 to 9 pm at The Women's Center, 315 E. Jones St. No pre-registration required. Babysitting provided. Call 755-6840 for more information.

The Triangle Chapter of the National Association for Professional Saleswomen (NAPS) will meet Thursday, August 1, from 6 to 8 pm at the Raleigh Hilton on Hillsborough

St. Come and enjoy an evening of getting acquainted and networking. For information contact Mary Namm 847-1716 or Faye Crumpler 469-2335.

The Wake County unit of the American Cancer Society will sponsor the Walter Hagen Golf Championship on August 14 at Wilmar Golf Club. Call American Cancer Society for details at 834-1636.

The Wake County unit of the American Cancer Society will sponsor the Walter Hagen Golf Championship on August 14th at Wilmar Golf Club. Call American Cancer Society at 834-1636 for details.



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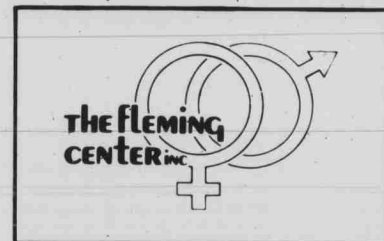
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Personals

Personals

An Apology

Technician sincerely apologizes for a misprint in last weeks personals. We hope no one was terribly offended and beg the pardon of the person involved. Please accept our deepest regrets. Below is the corrected version.

The Editor

Unto Him who is able to keep you from falling and to present you before His glorious presence without fault and with great joy - to the only God our Savior be glory, majesty, power and authority, through Jesus Christ our Lord, before all ages now and forevermore! Jesus is Lord.

Antisocialman,
Let's go for a spin.

Edie Haskel

Corinne,
Thanks for the great "workout" Thursday. It was great! Let's do it again some evening.

Females, Indulge yourselves!
In sundaes and banana splits, vanilla is the only one for me. Whether you're into snowcones or deep dish delights, I'm your man. I'll be looking for a sweet treat between these pages. If not now, maybe this fall.

The Ice Cream Man

Happy Birthday Susan,

SB Club

Hey Muffin,
I finally made it! What will we do first? One thing for sure: I'm not driving. David will DJ some CCM for us. How about jamming with George Beverly Shea? Want me to call you FIERO? Which is yours this time?
Truly, I am,

Chosen

I survived Hurricane "Bob!"
CYNICAL:MAN LIVES!

Jeff,
Surprise! I did it again! No problem about the five extra hours. Enjoying the tape lots! See you in August.

Cute Eyes

Partner JAW,
Did you know what a crush I had on you? You're very special and I'll miss you. Best of luck always.

Partner J

Sparky C
I just wanted to see my name in print.

Squirm,
I love you - your mind and body are awesome. How about dinner tonight, my place? Ice cream the way you like it for dessert. Be there.

To all the girls I've loved before:
Get lost.

To my favorite State,
This is life. But we'll have some great memories. And don't forget the spaghetti... in due time!

Minnesota

To my attorney,
I've left for Boston to write, take drugs, fear and loath with William F. Buckley.

Dr. Wolfe Hunter

P.S. I'll bring you back some lick'em tatoes and some beans.

MIRACLE YEAR BOOK

Bloom's Breathed

(Continued from page 6)

Today's newspapers seem to treat comic strips as fillers and cram them into small spaces that are hard to read and with Doonesbury demanding a set size Breathed commented that he might follow suit. Berke said, "If there is a reason for me leaving the strip, which may be in a few years, it will be because of size."

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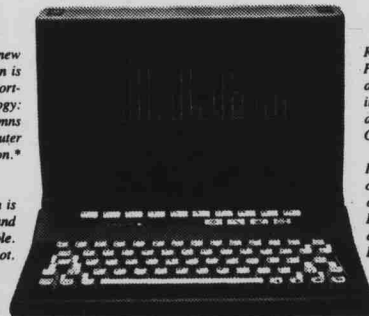
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*This is the best we could do for both screens. Really. Check them out in person. DATA GENERAL/One is a trademark of Data General Corporation. IBM is a registered trademark of International Business Machines Corporation, 1-2-3 and Lotus Development Corporation. Pivot and LumiCon are trademarks of Morrow Designs, Inc. **Refund request must be submitted to dealer within 15 days after Pivot II purchase.

Opinion

A paper that is entirely the product of the student body becomes at once the official organ through which the thoughts, the activity and in fact the very life of the campus are registered. It is the mouthpiece through which the students themselves talk. College life without its journal is blank.

Technician, vol 1 no 1 Feb 1, 1920

Living in fear

Ever since nuclear bombs destroyed Hiroshima and Nagasaki, politicians have claimed that nuclear arms have had a stabilizing effect on the world.

These politicians cite that there has not been another world war nor has there been another nuclear blast in an act of war.

However, not until recently has the public found out that almost every president since Harry Truman has considered using nuclear arms to end a confrontation.

Even though they decided not to use the bomb, it is quite alarming that they even considered the use of nuclear devices. In most cases the United States was not even threatened.

John Kennedy courted the idea of nuclear confrontation over the Soviet missiles in Cuba and the Berlin blockade.

Although Richard Nixon ordered extensive conventional bombing throughout Southeast Asia, he felt that the piece de resistance would be the nuclear destruction of the Ho Chi Minh Trail.

Furthermore, Nixon reasoned that the bomb would be a quick solution to three international border disputes: the '71 Indian-Pakistan war; the '73 Arab-

Israeli war; and a Sino-Soviet conflict.

Jimmy Carter twice deliberated over the use of the bomb in the event that the Soviets invaded Pakistan or Iran from neighboring Afghanistan.

During his first term in office, Ronald Reagan gave the Soviets an ultimatum — if they attacked Western Europe, then the U.S. would favor a nuclear response, consigning Europe to a nuclear wasteland.

Clearly, in most of these scenarios the defense of the United States was not an issue. Why did our leaders consider using these weapons? Simply because they had them to use.

In addition, we are not alone in the nuclear club. If our leaders speculated applying these extreme measures for common problems, what are other atomic world leaders thinking.

The atomic age has not stabilized world peace in the slightest — it has caused restlessness. It is a power that perhaps no one should have in his grasp. Only with mutual disarmament between all nuclear powers can the world situation ever improve.

Until then, we can only hope that our leaders do not decide to actually use the bomb.



High frontier waste of dollars

Talking about Space junk

Star Wars. High Frontier. Strategic Defense Initiative. Call it what you will; we'll call it a waste of American tax dollars.

In a country that is currently facing a \$200 billion deficit, the Reagan Administration is embarking on the most costly defense plan ever devised. Star Wars has been estimated to cost well over a trillion dollars for a system that may or may not work.

Since we do not currently have the technology to employ such a system, we must spend billions of dollars on research and development. Not only will this system bankrupt the treasury, but the waste, fraud and cost overruns inherent in the military-industrial complex will almost certainly deliver an unreliable weapons system.

Even if we could develop a super computer that could run such a defense system, it could be damaged by exposure to the electro-magnetic pulse (EMP) of a nuclear explosion. This EMP would then make the whole system inoperable.

Supposedly, Star Wars will make nuclear ICBMs obsolete by placing an "impermeable" umbrella over the United States. From a vantage point in space, satellites will use a barrage of high-tech weaponry to knock down incoming enemy missiles.

However, Star Wars will not effectively counter attacks from bombers, cruise missiles and submarine-based missiles. Although the Soviet arsenal is 90 percent land-based, they are relying more and more on these other weapon systems.

An operable defense umbrella would have trouble re-

AUSTIN &
DRAUGHON
Editorial Columnists

PELLING the current number of Soviet ICBMs. The Russians could easily overload the system by launching more missiles than the shield is designed for, thus laying waste to the American homeland.

In order to overburden America's strategic defense, the Soviets would have to amass a substantial number of missiles, which in the long run would be cheaper for the Soviets than our construction and maintenance of Star Wars.

High Frontier also could be highly vulnerable. Both sides possess anti-satellite technology that could be used to blow holes in the shield before an all-out attack.

Originally the shield was designed to protect the entire

continental United States. As the limits of the technology have been discovered, that assessment has been lowered. The Reagan administration said it would be used to protect our civilian population.

Now they say it could only protect our missile silos. In light of Star Wars' aforementioned shortcomings, we doubt it could even protect our missiles.

If the United States were to implement High Frontier, world stability would certainly be threatened. Reagan claimed that we would give our Russian friends the technology they needed to construct their own Star Wars system; we doubt our leader's promise to share this nation's state-of-the-art technology with its arch rival.

Chances are the Soviets would not accept the offer because they would see all the loopholes. They have better sense than to waste hard-earned rubles on burdensome space junk.

Star Wars can easily be compared to the French Maginot Line. It's big, clumsy and easily out-manuevered.

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Left gives up fight for freeze

There is a fine line between cynicism and realism, and on the subject of the nuclear arms race I have crossed that Rubicon so many times that it is often indistinguishable to me. Indeed, this topic has become so overwhelming to me that I even loathe discussing or writing about it.

However, this is the *Technician's* special issue commemorating the 40th anniversary of the U.S. bombing of Hiroshima, Japan — the first time fellow humans were slaughtered by an atomic weapon. And on this grim remembrance of that wholesale murder, it certainly would look out of place if I were to write a piece opposing the removal of cigarette vending machines from the Raleigh Municipal Building.

I was not so pessimistic about the arms race in November of 1982. The freeze movement was at the pinnacle of its influence and activism, and I was truly excited about the prospect of a nuclear freeze. The proposal had recently lost by only one vote in the House and as the returns rolled in on election night it was passing eight out of the nine states where it was on the ballot as a referendum.

I sincerely thought that a

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Technician welcomes Forum letters. They are likely to be printed if they:

- deal with significant issues, breaking news or public interest,
- are typed or printed legibly and double spaced,
- are limited to 300 words, and
- are signed with the writer's address, phone number and, if the writer is a student, his classification and curriculum.

Technician reserves the right not to publish any letter which does not comply with the above rules or which is deemed inappropriate for printing by the editor in chief.

Letters are subject to editing for style, brevity and taste. In no case will the writer be informed before that his / her letter has been edited for printing.

Technician will withhold an author's name only if failure to do so would result in clear and present danger to the writer. Rare exceptions to this policy will be made at the discretion of the editor in chief.

All letters become the property of *Technician* and will not be returned to the author. Letters should be brought by Student Center Suite 3120 or mailed to *Technician*, Letters to the Editor, P.O. Box 8608 University Station, Raleigh NC 27695-8608.

Fall Technician Editors' meeting
Aug. 21 at 1 p.m. at Tech office.

popular groundswell of support for the proposal would force it down Reagan's throat — that the people would actually demand peace in a voice so strong that the leaders of the world would have to listen or be forced from power.

Yet, two years later in the 1984 elections the freeze was almost nonexistent. Sure Fritz was for it, but support had dwindled to an occasional protest in front of a defense plant or a handfull of hard-core activists blocking a train carrying nuclear weapons with their bodies.

Where did the grassroots momentum go? Why did the freeze fade away? The answers are elusive at best.

It wasn't so much that the Right won the debate, it was more that the Left gave up. The conservative argument that it would endanger our national strength never held much water in view of the Pentagon's bloated defense budget and Reagan's vast weapons buildup.

Plus when the average citizen comes face to face with the pro-freeze argument, he will normally agree with it. The Left still has a powerfully moving opinion on the subject. It's just that liberals aren't voicing it as loudly as they used to.

Perhaps the Left is afraid of looking soft in comparison to Reagan's rigid militarism — maybe it's not popular to push for peace in the wake of such Russian actions as the destruction of KAL 007 a year ago or in the midst of the recent wave of anti-American terrorism.

Either way, the freeze movement appears on hold if

STEPHEN LEMONS
 Editorial Columnnist

not altogether defunct.

Without the call for a freeze the leaders of the earth feel free to play mind-games with the public. Recently this has manifested itself in the game of dueling-improbable proposals that both Gorbachev and Reagan have been taking part in.

Last Monday word came from the White House that the USSR is proposing a bilateral nuclear weapons testing moratorium between the two super-powers. The White House rejected the proposal as being to the Soviets advantage, but not before announcing their own farce of inviting the Russians to monitor a U.S. underground nuclear explosion. Predictably, Tass labled Reagan's offer "propaganda" not long after it was announced.

To the indiscriminate ear both of these proposals may seem surprisingly hopeful. Unfortunately, a second look provides a more realistic perspective.

Both offers come at a recess in the stalemated Geneva arms talks. And both offers are basically an exercise in grandstanding. Each of the ploys is being made so as to cast the other country in the role of the Bad Guys.

For instance, Gorbachev's offer seems reasonable

enough and appears to be a breath of fresh air. Actually it's old hat. A testing moratorium would in effect mean a technology freeze, since every advance in weaponry requires a certain amount of testing.

As the Reagan administration believes our advanced technology to have the edge in the arms race — an assertion not without some merit — a technology freeze is not something they're likely to go for. The Russians know this, and they

Reagan looks like an ogre in Europe

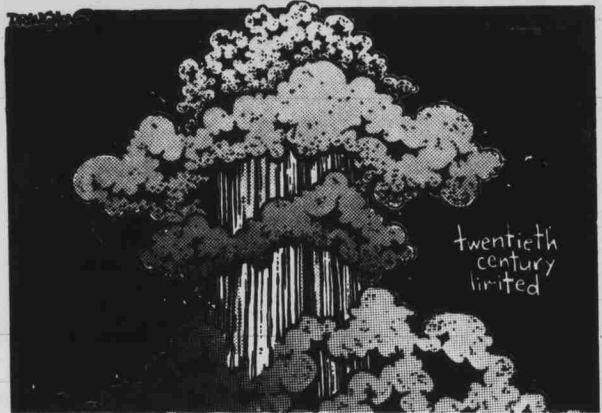
also know that by rejecting the offer Reagan looks like an ogre in Europe, an impression of Ronnie the Soviets love to bolster.

By the same token Reagan's offer isn't genuine either. The White House knew the proposal would be shot down. Even if it wasn't, Russian monitors would see only what the Pentagon

wanted them to see. And if it hadn't been for the Gorbachev overture, the Reagan administration would not have made the offer. This was a counter-proposal with no real substance.

Reading about these fake propositions, these propaganda games, only makes me more bitter and angry. I'm so tired of having the threat of holocaust hanging over our heads that sometimes I feel like pushing the button myself and getting it over with. After all, what's worse — to allow our children to be born amidst the fear of Gotterdammerung or to end it and save them from the futile quest for harmony?

On this black anniversary, I'm in search of hope — for as the freeze went so went my optimism. The demonstration that took place on the fourth lifted my spirits somewhat. But though heartening — it was a symbol, and I am weary of symbols. I want action. I want an end to the arms race now. However, I see no end to it. Now or ever.



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