Proposed budget exceeds $1 billion

by Mary Kelly

At the first meeting of the Cal Poly Administrative Council Monday, the tentative 1983-84 budget for the California State University system was discussed. It will be sent to the governor in January for approval.

Last year's budget was $942,548,643, but the CSU Chancellor's Office seeks a budget increase for 1983-84 that would raise it to over a billion dollars.

According to James Landreth, Cal Poly's director of Business Affairs, there are three components in the budget.

The first is the base line budget which accounts for price increases due to inflation, increases in staff benefit rates, and utilities. This year the Chancellor's Office is asking for a state-wide increase of $70,451 in this category.

Second is the program maintenance proposals which adjust the budget for changes in workload factors, an increase or decrease in the enrollment of students, and new facilities. This year the CSU is asking for a $13,243 increase in this category.

The third component of the budget is the program change proposals which are designed to improve funding of existing programs, make these programs more effective in achieving objectives, and funding new programs that were not on the previous budget. The CSU is asking for an increase of $16,214 in this category.

Philosophy head returns

by Anne French

“It's nice to be back,” said the head of the Philosophy department, Kendrick Walker. For the past year, Walker has been a visiting fellow on sabbatical to Princeton University. His fellowship entailed attending classes and seminars, writing, and doing research.

Walker said he enjoyed sitting on the other side of the podium in seminar. “Instructors sometimes lose touch with their students,” said Walker. He said he received a renewed appreciation for being a student. He spoke of the wonderful system Philosophy has of preceptorial discussion. This meant lab for a class would be conducted by a fellow professor and not by someone of lesser rank.

Regarding the Princeton campus, Walker described it as “stunning.” He drew comparisons between Cal Poly and Princeton in that both institutions are located in small towns, both are of some distance to large cities, and both campuses were a bit out of the city. Walker described the New Jersey community as “privileged, plugged into the system,” and the school as having a “old, cultural mix with all walks of life,” said Walker.

As an undergraduate student, he originally majored in American Studies at Berkeley when colleagues introduced him to the study of Philosophy. While completing his doctorate, “Philosophers of the Twentieth Century,” he taught logic at Mount St. Mary's College in Los Angeles.

He came to Cal Poly in 1973 as an Assistant Professor, “way back when California was tanked so high for its public education system,” said a frowning Lowell H. Dunigan.

Although there is no degree for philosophy offered at the Cal Poly campus, there is now a minor program. Walker said this is a step in the right direction.

As for as long as he has served as department head, Walker has resided on a 40-foot sailboat in Morro Bay. He enjoys the solitude and outdoor environment.

In Fall 1973, 1,923 freshmen enrolled. In the fall of 1974, 1,460, or 75 percent, returned; thus, 24 percent was lost.

“...it's a dog's life when your owner eats lunch and leaves you in the back of the truck. Such was the case for this canine last week in a Cal Poly parking lot.
USSR arms talks continue

WASHINGTON (AP) — Under orders "to move as rapidly as the situation permits," U.S. arms control negotiator Edward L. Rowen is entering a second round of talks with the Soviet Union convinced that Americans would abandon the nuclear freeze movement if they understood the administration's treaty proposal.

Freeing weapons at current levels, as Soviet President Leonid I. Brezhnev suggested last May, or only trimming stockpiles of intercontinental ballistic missiles and long-range bombers would heighten the risk of nuclear war, Rowen said in an interview before flying to Geneva for the new round of talks beginning Wednesday.

Rowen's reasoning: It takes the sort of deep reductions proposed by the United States to correct the 5-2 Soviet lead in missile power, or throw-weight. That would mean for the first time in the history of space flight, Rowen postulated, that a Soviet missile could conceivably reach anywhere in the world and destroy American cities.

Rowen and other U.S. strategists theorize, risk of nuclear war, Rowen said in an interview before the Moscow summit, would be greatly reduced if they understood the administration's treaty proposal. The United States has already offered to turn over its Minuteman missiles for exchange.

The Third Resister convicted

CLEVELAND (AP) — A federal court jury on Tuesday convicted Mark Arden Schmucker, a Mennonite college student, of failing to register for the military draft. He was the third person convicted of the charge in trials this year.

The eight women and four men on the panel deliberated one hour and four minutes before returning the verdict in the courtroom of U.S. District Judge Ann Aldrich.

Strychnine found in Tylenol

Orovoille, Calif. (AP) — Strychnine was found in two bottles of Extra-Strength Tylenol capsules here and a man who took the medication suffered convulsions, federal officials said today.

The U.S. Food and Drug Administration, McNell Consumer Products Co., which makes Tylenol, is urging nationwide to withdraw non-prescription Extra-Strength Tylenol capsules and regular-strength Tylenol capsules from sale.

The man took the poisonous capsules Thursday, one day after cyanide-laced Extra-Strength Tylenol capsules began claiming their first victims. Seven died after taking capsules in the Chicago area.

There is no evidence the discovery of strychnine in the capsules is related to the worst Chicago-area deaths, said Robert Kniffen, a spokesman for McNell, a subsidiary of Johnson & Johnson.

Both the manufacturer and the federal agency warned consumers against taking any Tylenol capsules.

McNeil has stopped production of non-prescription Tylenol capsules.

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When Performance Must Be Measured By Results.
Lecture series to begin

A talk on technology by Péter Diamandopolous, PhD, president of Sonoma State University, on Thursday, Oct. 7, will open the 11th annual Arts and Humanities Lecture Series at Cal Poly.

The lecture on "Technology: Problems and Prospects" will begin at 11 a.m. in Room 220 of the University Union. The lecture is open to the public without charge.

Diamandopolous is expected to focus on the characteristics of modern technology, exploring its challenges to public policy, social aspirations and private morality.

His aim, he has said, is to underscore the uncertain relation between technological determinations and individual freedom ... to suggest the responsibilities of higher education in preserving a precarious but creative balance between scientific advances and innate human limitations.

Born on the Greek island of Crete 52 years ago, Diamandopolous received a diploma in mathematics and natural sciences from Athens College in 1947.

He earned his bachelor's, master's, and doctoral degrees from Harvard University. His doctorate, granted in 1957, is in philosophy and classics.

Diamandopolous taught and held administrative positions at Bates College (Maine), University of Virginia, Swarthmore College (Pa.), University of Maryland, American University (D.C.) and the Adal Stevenson Institute (N.Y.). Before he accepted the presidency at Sonoma, he was chairman of the Department of Philosophy and the History of Ideas at Brandeis University (Mass.).

He is the author of articles and reviews in professional journals dealing with the history of philosophy, the history of science, and public policy.

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ON CAMPUS INTERVIEWS
Cal Poly, San Luis Obispo
October 21, 1982
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REACH FOR TOMORROW WITH MARTIN MARIETTA AEROSPACE

MARTIN MARIETTA AT VAN DEN BERG
Cute little kid, or feisty little twerp?

Only Tina Taylor knows for sure

Mustangs have won 13. Tina has run a good mile-and-a-half tracking down passes to set.

"I think my strongest point on the court is my speed and ability to get to a pass and set it," remarked the 15-year-old. "1 can't really get upset when the passes aren't that good and I do have to run for them. If I do get upset, then I get everyone else down. I just tell the passers, 'that's okay.' And I hope with that attitude the passers will get a little more confident."

Confidence is something Cal Poly lacks a certain amount of right now. But, the season is young. And Taylor, for one, knows it will pass.

"We're still in up-and-down stages," she said. "We're still sorting out some wrinkles. We're still getting to know each other out there. All good teams go through this to an extent. It won't be happening in December, through."

December is the month all college teams in the U.S. are shooting for. It's playoff time. The month when it counts the most. It's the Nationals. The Final Four. A 1982 champion. Taylor, like the rest of the team, knows it will pass.

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"This has been the most intense year for me," said Taylor, who is the first female to play all four years under Wilton. "I can feel how close we are in going to Nationals. We have more depth this year than last year (when the Mustangs finished tied for fifth in the nation 41-8). Wendy came back having improved a lot. Terri (Purling) can now block and hit right-side like she has never done before. And Sandy (Aughinbaugh) is playing better than she did last year. Everyone has just improved."

Especially Taylor. She was called upon during the United States Volleyball Association (USVBA) season to do something she had little experience in doing — setting. Through her first three years in a Poly uniform, Taylor had been a right-side hitter. She was just a part of the offense. Now, the offense is revolving around her.

"I started setting during USVBA basically because there was no one else to do it," commented Taylor, who is the team's co-captain with Aughinbaugh. Taylor is the captain on the floor. "I worked with Tino (assistant coach Tino Reyes) some. I had relatively okay hands and had enough technique down to build upon. The big issue was the experience."

"Coming into the year I had a lot of people telling me how good Dede (incoming freshman Dede Bodnar) was. But I told myself no one was going to start in front of me. And I worked toward that goal all summer. I worked out some with Sandy, but mostly I worked out by myself. I ran and lifted weights. Sometimes I would go down and talk to Mike and run with him. It was kind of a good feeling in a sense because I was doing this for myself. I wasn't out there for anyone else, and I didn't have to impress anybody."

Taylor did impress people with her play in USVBA. She was an All-American honorable mention selection in the Volleyball Monthly pre-season picks. Taylor, though, is not all impressed with portions of her play (thus far).

"My blocking is the worst part of my game right now," she said. "I've never really been that bad of a blocker. I've done it as a right-side hitter the last three years. I should be putting more time into blocking in practice. I think I'm concentrating more on getting to the ball once it passes the block. But that getting to the..."
Forget about homestand image, soccer team plays the best

by Mark Gong
Staff Writer

What a difference a division makes.
That must be what Cal Poly men's soccer coach Wolfgang Gartner is thinking as his team prepares for its fifth match against a Division I team this season.
The game, against Loyola-Marymount, will take place tonight at Mustang Stadium at 7:30.
The Mustangs sport a perfect 2-0-1 mark against Division I schools. However, a look at the opponents shows that none of those teams have been cold fare.

For example, the Stanford Cardinals, who best the Mustangs 2-1 earlier this year, are ranked No. 4 in the Far West. The Gauchos of UCSB, who also defeated Poly 2-1, are ranked sixth in the Far West. The Far West also includes such teams as San Diego State, number one in the nation, and the University of San Francisco, the Division I champs last year.

Loyola, called the Lions, is in a conference with San Diego State, UCLA and USC, to name a few. Recently, Gartner explained his reason for scheduling every non-league game with a Division I team. "We want people to come out and see the best college soccer around. They don't come and pay for nothing. No one around plays a schedule like we do. We don't care if they (the spectators) think we are good, at least know that the other team is," said he.

Not only that, but the experience the Mustangs get playing against some of the best soccer players in the nation can't do anything but help during league matches.

Looking down the road, it seems the Mustangs will be getting lots of exposure, with the likes of Pacific, Fresno State, Santa Clara and St. Mary's all waiting in the wings.

But in the meantime, Gartner and his players will be setting their sights on one thing — their first win against a Division I school. They hope that happens tonight.

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LIVE ENTERTAINMENT NIGHTLY

kid or twerp?
From page 8

ball for the set should be natural.
One of the teams the Mustangs must beat to get to the Nationals will invade the Main Gymnasium Friday evening. The University of the Pacific, where this year's National Championships are being held, will be looking for a bit of revenge. Last week Poly whipped the Tigers 12-15, 15-10, 16-15. Friday's affair is scheduled for 7:30 p.m.

"It's going to be an awesome show versus OUP," Taylor said. "Be there."
More graduate from Poly

From page 1

This freshman class, 870 graduated and received their bachelor's degree. Two people finished in three years, 240 in four years, 390 in five years, the same in six years and 74 in seven years.

Therefore, 13 percent of the class graduated in four years, 20 percent in five years, eight percent in six years and four percent in seven years. Overall, about 41 percent of that freshman class graduated at Cal Poly. This is the highest rate in the CSU system.

Following Cal Poly were Chico with 43.4 percent of years, 20 percent in five years, 45.6 percent at that at Cal Poly. This is the fourth in six years, eit peromn in six years, 875 graduated and received the class graduated in four years, 240 in four years, 390 in five years, the same in six years and 74 in seven years.

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Push comes to shove

This is one kicking, slapping, pushing and shoving incident on the Poly campus that won't make front page headlines.

The incident occurred to more than one concert-goer at last Saturday's concert in the Main Gym. During the Beat's performance, "seating arrangements" in the first several rows were so packed that there were grumblings of petty, yet vicious, violence certain Beat fans saw fit to use.

According to one concert-goer in the front row, two girls were eviction off their seats by other people. Admittedly, many music fans put up with masses of people and crowd to hear their favorite groups but other fans don't enjoy putting up with rude, impersonal behavior like that exhibited at the Beat concert.

Whether it be screening out concert-goers who are drunk or hiring more security personnel to help maintain at a nonviolent level of exuberance, the Mustang Daily Editorial Board believes steps need to be taken to make concerts at Cal Poly more enjoyable and safe for all.

Dear Editor:

I refer to your letter which was published on Sept. 20th. First of all, I would like to mention that Ms. Cory is way off-base in her denial.

I believe this. It is not the case. I would like to know if Ms. Cory misunderstood my intentions and the point that I was trying to make. The point is: I want to make women aware that they do have a fighting chance, chance to get away in a bad situation. In talking with rape victims I have found that they generally freeze up and aren't able to do anything to help themselves.

Ms. Cory is making people think that I did not believe General Education is to educate, not only in technical or professional fields but also in the arts and humanities. I also show simple and easy techniques. I also show techniques and then move to the at-tack under stress. I first become familiar with my students with other techniques and then move to the attacks. No one is hurt by me. I let them practice their favorite techniques on me for them to find out which ones work and which don't. As far as taking "unnecessary risks", I encourage that they be avoided whenever possible.

I in no way insinuate that women are responsible for the attacks upon them. No information in my letter had anything to do with this. I believe that Ms. Cory is making people think that I believe this. It is not the case.

Letters

Not a waste

Dear Editor:

We appreciate your interest and willingness to publish articles dealing with university acts and practices—and more particularly, the recent article regarding the misquote implied that the admissions plan was concerned, I put my students there by actually attacking them.

Before I do that, I let my students know of my intentions and philosophy. It is to prepare them for an actual attack under stress. I first become familiar with my students with other techniques and then move to the attacks. No one is hurt by me. I let them practice their favorite techniques on me for them to find out which ones work and which don't. As far as taking "unnecessary risks", I encourage that they be avoided whenever possible.

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Dear Editor,

This is in regards to the opposition of my letter which was published on Sept. 26th. First of all, I would like to mention that Ms. Cory is way off-base in her denial.

The class that I taught was advertised for three weeks prior to the start of the class. It was also spread by word of mouth. In my class, I stress the simple and easy techniques. I also show how to make them work effectively. As far as an "emergency situation" is concerned, I put my students there by actually attacking them.

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**Picture Palindromes**

Each of the pictures below represents a palindromic phrase—a phrase spelled the same forward and back. The answer to each picture can be written on the corresponding dashes, one letter per space. For example, the first picture shows RACE CAR. We'll leave the other 9 for you to reflect on.

Example: RACE CAR
matoes. And along with hundreds of tons of produce, the liquor maker has cultivated some welcome fuel savings.

The waste heat comes from the condenser cooler water and from the flue gases produced by the butane-fired furnaces. The cooling water is heated by the condensers and is used to warm specially built greenhouses. Another by-product of booze-making is carbon dioxide, which is pumped into the horticultural facility where it aids photosynthesis and increases plant yield. Last year, the process produced more than 156 tons of tomatoes. Aside from making money on the tomatoes, the company is saving money, too, since the process eliminated the need to build a second cooling tower; the greenhouse produces gases that when cooled are used to dry the malt kiln.

### PROGRESS MARCHES ON

Have you ever wondered where some of those absurdly useless items advertised on late-night TV come from? Who ever thought up things like a Vege-matic, smokeless ashtray or fold-up fishing rod? Well, if Iowa State University has its way, we can look forward to more of the same.

The school's Center for International Research and Service recently instituted a program to assist inventors and manufacturers in developing new products. "The goal is to promote the creativity of Iowa people, their talents, and resources," says the coordinator of the program, called Program for Innovation.

Speaking of creativity and innovation, here are some of the 30 "inventions" already submitted. We've also ventured some guesses as to how these brainstorming ideas could be utilized as well as where in hell they might have come from.

1) "An ear tagger for animals" — This was probably invented by a former punk rocker and his French polecat after they both got tired of jabbing safety pins into various parts of their bodies.
2) "Shaving soap additive" — This is probably a ploy by one of the shaving cream manufacturers. It induces rapid growth of facial hair, requiring the user to shave three times a day — which means he'll have to buy three times as much shaving cream.
3) "Bathroom tube caddy" — This one is likely to be a vacationing teenager who comes into your bathroom every morning with a leather bag filled with toothpaste and No. 9 dental floss.
4) "Bedside wastebasket" — This one is a convenience item for those nights when you just can't make it to the john.
5) "Cattle wash, dry, groomar" — Now you can coax every last drop of oil out of your cattle.
6) "Disposable squirrel feeder" — This one is a baffle, since we missed the news that someone had come up with a disposable squirrel feeder.

### THE SUN MANS NOT FADED ON SOLAR POWER

And what happened to solar power? Though James Watt and his mineral menders are determined to squeeze every last drop of oil out of this tired old Earth, there are those who still believe in our solar future. To prove that we're not just whistling in the solar wind, we've located four solar power plants already in operation:

1. **In Southern California's Mojave Desert**, near the town of Barstow, sits the country's first commercial solar plant, which commenced operation early this year. When it goes on line, "Solar One" will begin feeding electricity into Southern California Edison's power grid. The project includes a dazzling array of 1,818 mirror-like heliostats and a 325-foot tower topped by a "central receiver," which is akin to a conventional hot-water boiler. Sunlight reflected from the heliostats heats the boiler, which produces steam to drive a turbine. A computerized control system keeps the heliostats tracking the sun across the sky. Engineers hope to produce 15-megawatt watts—a relatively small output, but enough to supply the annual needs of about 2,500 families. A larger, 100-megawatt solar plant, divided Solar 100, is planned to be in operation by 1988.

2. **Halfway around the world**, in Saudi Arabia, a solar plant has been providing electricity for three villages near the Saudi capital of Riyadh since last fall.

3. **In Saudi Arabia**, the Saudi installation produces power directly for the local photovoltaic villages. The plant uses about 300,000 photovoltaic cells that are individually mounted on concrete pads and support pedestals. The system keeps them tracking the sun.

4. **A third site**, located near the town of Melilla, Spain, is undergoing final tests. The 500-kilowatt plant, consisting of the heliostat-concentrator mirror setup like that at California's Solar One, will produce power for the country's appropriately named Caleta del Sol (Sun Coast). The site was built by a 10-nation consortium of energy agencies.
The first quirtls appeared on a Saturday in late June. A deputy sheriff in the Mojave Desert reported an estimated 100 of them out among the cacti. What they were doing, he said, was eating sand.

There was consternation at first, but it developed that no cause for alarm existed. The quirtls were completely nonaggressive. In fact, they were gentle, passive, only moderately inquisitive, and very affectionate. And their intelligence level appeared to approach that of an average house cat.

That was what they reminded most people of — cats. They were about eighteen inches long and seven or eight inches high. They had Crested heads and feline faces, with big, round, adoring eyes with inch-long eyelashes; they had no legs or other extremities, except for a taillike appendage which they curled under themselves and used like a spring to bounce-hop along at amazing speed; they had an index-sized orange body covering that was sort of like fur and sort of like feathers, but not quite either one, and velvety to the touch.

And they liked to be touched — or, more precisely, petted — by humans regardless of race, creed, color, or cleanliness of hand. They seemed to enjoy that more than anything, including the ingestion of sand, dust, and small pebbles. That was all they ate, too. Regular food was all they ate, too. Regular food — anything, "like dirt, the ingestion of which was how they got their name. They were gentle, passive, only moderately aggressive. In fact they said, was eating sand.

No one knew where they had come from. No one knew what they were doing here. Most thought they were aliens, creatures from another world. But no spaceships were sighted and the quirtls themselves shed no light on the matter. Their entire vocabulary consisted of a sound that resembled "quirt," which was impossible to interpret.

Representatives from the government, and a variety of scientists, got together to explore the phenomenon. Some of the creatures were taken to laboratories in those early days, where they were subjected to tests and examinations. A few were dissected in the interest of scientific knowledge, and proved unlike anything on Earth.

The appearance of the quirtls was the primary topic of conversation from Portland, Maine to Portland, Oregon. And it was the reason why, in a medium-sized city in California, a man named Del Henderson met a woman named Moira Andrews.

The occasion of this meeting was a benefit for the Cancer Fund. Henderson was mingling, looking for an interesting and interesting member of the opposite sex, when he spied the attractive redhead talking to a local politico. The politico was saying that the quirtls — or "little bugs," as he termed them — were pests, alien or otherwise, and ought to be exterminated before they bred like rabbits and overrun the town. The woman said that was ridiculous; they were harmless creatures and deserved to be treated with kindness and charity.

Henderson stepped in and offered an eloquent argument in favor of the redheaded view, although he really didn't care one way or the other. She seemed to approve of both him and his attitude toward the quirtls, so, when the politico wandered off, he asked her out to dinner the following evening. She said yes.

On their first date, and on those which followed, Henderson learned that Moira, a 28-year-old owner of a maternity boutique, was an old-fashioned maternal spirit; she liked children, books, chocolate-chip ice cream, quiet evenings at home, and long-term romantic involvements. And Moira learned that Henderson, a 20-year-old free-lance photographer, was a modern free spirit; he had an iridescent maturity which followed, Henderson learned, they seemed to have a kind of crazed resemblance, which added to their strange effect on people.

Skeptics, and that was the cause of controversy, were accused of being quirt philosophers, with more and more needed as the animals multiplied, and the unemployment problem, especially among teenagers and inventories, was soon solved. The desert quirtls were transforming all of the great Western deserts, crops were being planted, and with the protein shells of the quirt eggs, the threat of famine was fast disappearing. The automotive industry was starting to flourishe again as well. Ford, GMC, and Chrysler were at work on a million-dollar project to import and begin manufacturing gigantic gas-guzzlers again. In a statement to the press, Henry Ford II said, "Small cars mean small bucks. Big cars mean big bucks."

伸川的Quirtls

The 60 Minutes interview with Stretch Rabinowitz was aired. He was a shrewd, pleasant man given to wearing Levi's, sweatershirts, and sneakers at all times, even during the interview. He had won an athletic scholarship to Stanford University at the precipitous age of 15, where he had excelled at basketball for four years and where he had been given his nickname of Stretch. He did not particularly care for the name, he confided to Mike Wallace, but he was philosophical about its becoming attached to him. "It must admit," he said, "it is marginally better than being called Harold."

Also while at Stanford, he had amazed his professors in the fields of genetics, eugenics, biology, and biochemistry. After graduating with degrees in these and related fields, he had announced his intention to solve all the world's ills and then had disappeared for the next six years. During those six years, he had created the first quirtls, and was in the process of creating others at present. Within a few short years, he claimed, they would bring about not only global prosperity but global harmony as well.

Two varieties of quirtls had been genetically perfected so far. The first was the orange-headed quirtl (all quirtls were color-coded, he explained) which ate desert sand. The second type, peacock-blue, ate broken glass, empty bottles, beer cans, candy wrappers, and produced siliceous and recycled aluminum. With all quirtls, these types were hermaphroditic and self-fertilizing, reproducing by laying eggs (there was one egg per quirtl) which hatched after having been petted for not less than twenty minutes per day — the petting was necessary to fertilize the eggs and to breed true. All were toilet-trained to leave their droppings in appropriate receptacles.

"The other quirtls in various stages of development," Stretch Rabinowitz said, "were the pale-yellow smog quirtl, larger than the domestic varieties, which breathed carbon monoxide and spewed forth exalted pure oxygen; the very large, bright green oil quirtl which ate oil and produced white light, sweet crude oil superior to Indonesian crude; the very, very large, dark red desert quirtl, which ate toxic waste, automobile tires, automobile wreckage, and produced raw rubber and metal; and the very, very very dark, dark, desolating quirtls which perpetuated themselves by live birth (they resembled gigantic whales, at least in size), and which drank sea water and produced sweet water, as well as extracted minerals, without affecting the natural food chain.

Rabinowitz, in conclusion, emphasized that Stretch Rabinowitz, Inc. by this time everyone referred to him as Stretch, was one of the first American industries to achieve worldwide success. He was determined, he said, that his company would bring about a new global order of life, small and great, a new global order of life which would be free of all the horrors of the past.

"One day," he predicted, "a new world will be born in the West. The oil quirtls could provide them with all the energy they required, the oil quirtls could solve their problem permanently. Desert quirtls were sold or traded to transform the Sahara and the Middle East deserts into agricultural vallethas. The DeBeer's diamond syndicate purchased 5,000 limousines, each green diamond-producing quirtls for 50% of DeBeer-Stretch Diamond stock) and fed them blue clay from South Africa, with the result that they were able to obtain flawless diamonds as large as the fabulous Kohinoor. Even the Russians were forced to publicly admit the vast in

Paul Ollswang

(continued on page 16)
NIKOLA TESLA: The Greatest Inventor of All Time?

BY NBC BAYLOR

Understanding Tesla's impact is a challenge even today. Tesla himself acknowledged, "There is a tendency to think that invention is the work of a single brain, a sort of spontaneous act. It is a common mistake to suppose that invention springs from nowhere, that it is a sudden flash of genius. In reality, invention is a slow, steady working out of a problem over a long period of time." This quote captures the essence of Tesla's work and innovation.

One day Tesla had the idea to bolt the overriding device onto the ground outside his house. As he worked on the device, the little NYC neighborhood was transformed into a bustling, electrified city. The result was a series of powerful electric waves that lit up the entire city with a brilliant orange glow. The audience was amazed, and Tesla became a national sensation.

Tesla was an innovator in the truest sense of the word. He was a true visionary who looked beyond the boundaries of traditional engineering and into the future. His work laid the foundation for modern electrical systems and continues to inspire innovation today. As Tesla said, "There is no age of invention. There is only people who invent and people who do not invent."

In conclusion, Tesla's influence on the world is undeniable. His ideas and inventions have paved the way for countless technological advancements, and his legacy continues to inspire innovation and progress. As Tesla once said, "There is no limit to human potential. It is only limited by the collective consciousness of the species."

References:
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BY PAUL ROSTA

In the old days, it all seemed so simple: a brilliant, half-crazed inventor would spend months or years in the laboratory, perfecting the automobile, the telephone, or the airplane. When that wondrous gadget finally saw the light, presto! A new industry, spawning a new way of life and gravy for all—including the inventor, if he was lucky enough to be named Ford, Bell, or Wright. Other inventors were perhaps not so lucky, and saw the lion's share of the goodies go to the canny businessmen who were able to market the new device.

Nowadays, of course, it's another story. Instead of lone inventors (who were not always so lone) laboring independently of outside interference, there are whole armies of researchers under the wings of major corporations. In such fields as energy, computers, aerospace, and electronics, companies are playing for high stakes, and an inventor's success can mean profits for the corporation and prestige for the inventor. How much appreciation a corporation and prestige for the inventor can mean profits for the company, 20 per cent of the next $10,000, and 10 per cent of all the profits after that. An especially productive inventor may earn between $3,000 and $10,000 per year from royalties, a McDonnell Douglas spokesman said. In one outstanding (and possibly unique) case, an inventor cleared $2 million in royalties, because his work made possible an entirely new kind of high-altitude jet aircraft. If Boeing decides to sell off a patent to someone else who can make more use of it, the inventor is not left entirely out in the cold. He receives 20 per cent of all the profits resulting from the sale of the rights to the other company.

The whole system of rewards and royalties for inventions could soon change if sponsors of a bill now in hearings before the House Judiciary Committee have their way. Should H.R. 6635 become law, companies will no longer escape with flat awards or no awards for inventions. Instead, each inventor would have the right to negotiate with the company over the fair market value of the device, and the inventor's right to a share of the windfall. A special arbitration board at the Patent Office will mediate any disputes between the company, 20 per cent of the next $10,000, and 10 per cent of all the profits after that. An especially productive inventor may earn between $3,000 and $10,000 per year from royalties, a McDonnell Douglas spokesman said. In one outstanding (and possibly unique) case, an inventor cleared $2 million in royalties, because his work made possible an entirely new kind of high-altitude jet aircraft. If Boeing decides to sell off a patent to someone else who can make more use of it, the inventor is not left entirely out in the cold. He receives 20 per cent of all the profits resulting from the sale of the rights to the other company.

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The Premature Burial? Well, Edgar was playing on a popular 'need, inventers took out more than a dozen patents for Premature Burial. We live on the verge of an era of technological expansion. The hand-held computer with built-in Modems to talk with Big Brother around the world. The mind boggles. But for every Jensen interceptor there are at least two Edsels. For every fit, trim, pursued body emerging from a Nautilus torture shop there are a dozen flabby deskworkers still trying to get visible results from isometrics.
To put it bluntly, the failures outweigh the successes by a health margin. Because most biological dinosaurs have the good grace to sink quietly into the Bog of Time, many people have the impression that the Western World has produced an uninterrupted flow of marvels, unblemished by error, miscalculation, or brute stupidity.
As an educational publication, it is Beyond's solemn duty to disabuse these millions of false notions. With a hint of a twinkle in the eyes, or the slightest trace of a guffaw in the back row.
The failure of a product to make it in the marketplace can be attributed to a number of factors:
1) The damned thing just doesn't work. (For instance, the billion-dollar Atomic airplane idea which was finally dumped in the fifties.)
2) It works, but not as well as it was hyped, thereby creating a customer backlash. (The aforementioned isometrics, for instance)
3) It has unexpected, disturbing side effects. (Thalidomide)
4) It works just fine, but cannot find a market for one or many reasons. (The Picturephone. Surely one day its time will come, but test marketing thus far has proven the average subscriber too camera-shy to enjoy the idea.)
Let's take a look at some of the inventions through the ages that have brought headaches, grief and sometimes financial ruin to their developers and users.

Does anyone out there remember the Edgar Allen Poe story, "The Premature Burial?" Well, Edgar was playing on a popular fear of his time as surely as Stephen King now plays on modern paranoia. In the middle and late 1800's, there was a flurry of panic about catatonia and other paralytic states that might cause one to be interred before one's time. To respond to this need, inventors took out more than a dozen patents for Premature Burial alarms, which were, for a short while, quite the rage.
Another invention killed them, however. It too was advertised as a "sure cure for premature burial." It was called Embalming.

In the early 1900's, the Stanley Steamer caused quite a stir. Powered by kerosene and water vapor, it broke the land speed record, clocking in at 127.66 mph in 1906. Despite their efficiency and speed, steam powered cars had some problems which needed to be ironed out — and which resulted in their being superceded by the gasoline, internal-combustion engine. R.A. Gibbs, President of the Steam Auto Club of America, Inc., says, "Steam engine cars burned vaporized fuel, and had a pilot light which had to be lit from an exterior heating device like a blowtorch or a wick. They then heated kerosene or gasoline for the main burner. Part of the problem was the tiny office where the vapor was jetted into the main combustion chamber. This could be clogged with a chunk of carbon."
There were other problems, too — it would take from twenty to thirty minutes for the water to heat sufficiently to start moving. In cold weather, you had to protect the vehicle, or the water might actually freeze.

In addition, many people were afraid of the pressures involved with the boiler — around 600 lbs ps. This was in spite of the fact that no one was ever known to have been hurt by the explosion of a steam automobile's boiler. "Today," Gibbs concluded, "we have most of these problems handled. On some models it takes only 60 seconds to heat up the water to the point that you can begin to move." Gibbs' organization hopes to re-establish the public with the unique potential of these forgotten vehicles.

The Roaring Twenties saw the emergence of another somewhat jollier invention: Lydia Pinkham's Vegetable Compound for Feminine Fatigue. This was back before the Pure Food and Drug Act, when Coca-Cola actually was "The Real Thing." Ms. Pinkham's concoction of opium, salt, boric acid, sugar, and alcohol was said to cure colic, amenia, hyperactivity, and nervous symptoms in general. Their motto was "A baby in every bottle," no doubt a reference to the Compound's claim to cure sexual dysfunction.

It was a great favorite of the Women's Christian Temperance Union, and it is a safe bet that after a hard day of campaigning against the horrors of alcohol, the ladies would go home and knock back a few belts of their favorite medicine. Few of them realized that they were addicted. It is well known, however, that it was common for them to defer their mortgage payments until they could get their cases of Pinkham's tonic. When the Pure Food and Drug Act passed, the opium was removed and the alcoholic content disclosed. Hundreds of WCTU ladies went through opium withdrawal and D.T.'s.

There's undoubtedly a moral here somewhere...

In the 1940's Hitler was marching in Europe and Africa. Metal was scarce, so Howard Hughes convinced the defense department that the ideal solution to both problems was to build a plane made out of wood.

Made largely of plywood, the Spruce Goose was born. The plywood airplane was the largest plane ever built, and would have carried 750 troops. It only flew once: Hughes had ordered it run across the waters of Long Beach without a take off. Afterwards he told the Congressional witnesses that he couldn't hold it down. It was never mass produced, and never used again, but it still exists. The City of Long Beach hopes to turn it into a tourist attraction like the Queen Mary.

How about a couple of Miltown?" was a standard joke in 1950's era E.C. comic books, and a more tasteless jest never came out of Mad magazine.

Miltown was one of a family of drugs called Meprobamates (such as Soma). It affects the hypothalamus, causing hormonal changes. Women's voices deepened, men lost their beards. Much more importantly, the Meprobamates are the most physically addictive class of drugs. Heroin, in comparison, is 8th on the list.

A typical dosage was 250 to 300 mg, three times a day. There was one big problem: tolerance develops within 72 hours, and the dosage had to increase for this "mild sedative" to be effective. When the dosage hit 600-900 mg within a 24-hour period, one developed significant loss of logical faculties. Physical addiction began at 2400 mg/day, a dosage which was reached within a few weeks. At 3600 mg/day withdrawal included hallucination, coma, and life-threatening seizure.

How life-threatening? One woman who went through withdrawal in the hospital under full medical supervision and restraint lived, but her seizures broke all of the bones in her arms and legs, dislocated her back and cracked her pelvis.

While on the subject of medicine, we should mention the non-prescription diet aid. A look through the pages of any mass-market tabloid will find a wealth of these "Scientific Miracles," promising weight loss without work and/or without cutting back on food intake — everything from expanding cellulose tablets (which are marginally useful, helping you to feel "full" before you are) and the kind of vibrating pads which are a physiologist's nightmare — the ones which claim to "break up cellulite deposits," or "wash away fatty tissue.

There are even more interesting ones, like the legendary diet tablets sold on a popular teenybopper TV show of the Fifties, which supposedly contained dormant tapeworms. The story may be apocryphal, but the message is clear: there will never be an end to the "heat tablets," "starch blockers," electroshock muscle stimulators, whirlpool massages, and all of the other props which allow people the comfortable illusion that they are "doing something" about their weight problems.

As we move into the Sixties, we would be remiss not to mention the Bell Rocket Belt, once thought to be the ultimate solution to infantry transport in the military.

Developed by Bell Aeronetics in 1961, it had a tiny problem — it could only remain airborne for 21 seconds. As a result, its primary use has been as a crowd-pleaser at country fairs, and as a special effect on Lost in Space and the James Bond movie Thunderball.

(continued on page 18)
Oops, Wrong Number

BY JON H. CLINCH

"I am a scientist," he told me. "To be precise, I used to be a scientist, before my — he wiggled his eyebrows. — my accident." The intruder, swaddled in an amorphous, smudged gray cloak, hiked himself up onto the stool beside mine and eyed my egg salad sandwich. "But before I show you the results of that, my friend, you must hear my tale..."

This hosing stranger wasn't one of the regular lunchtime crowd at Angelo's, but the place was pretty empty; I ordered us two cups of coffee and listened.

"I worked for Bell Telephone, see, in Research and Development. You've seen my work — I did the Mickey Mouse desk phone and the busy signal. Both popular items, but small potatoes, believe me.

"Sitting around the lab one day, I had this idea that I knew would absolutely revolutionize the telephone business and plunge society ahead by a million miles. I also saw a hefty bonus in it, incidentally. This was the idea: Telephone Teleportation. I figured that when the railroads screwed up, the airlines came in and took over, correct? Of course. So, since the airlines had blown it, the time seemed right for Ma Bell to jump in and start sending people from one spot to another over the phone lines."

"You can thank God my wife wasn't home to answer the phone, or I'd have spilled it all over her. I'd have stuck to the walls like a balloon at a party, I tell you, and that would have been the end of it." He shivered.

"But Snyderman brought me back. He got in the booth and jiggled the disconnect lever until my dime came back, and then he called the operator. In a flash I materialized right there in the booth with him, more or less." He leered. "I say 'more or less,' you understand." He leaned close, he smelled awful. I began to suspect that his wife was strictly imaginary.

"I'd been floating around in the system for a couple of minutes, and my signal had begun to deteriorate. When I emerged, I was just a little bit mixed up — if you get my drift."

"H e stood outside the booth while I put in my dime and pushed the buttons.

"I dialed the wrong number. "You can thank God my wife wasn't home to answer the phone, or I'd have spilled it all over her. I'd have stuck to the walls like a balloon at a party, I tell you, and that would have been the end of it." He shivered.

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He winked slowly and deliciously, slid off the stool, gathered his cloak about himself, and was gone. I paid for the sandwich and the coffee, and then I left too.

Jon H. Clinch is an advertising and public relations writer in Quakertown, PA. His humorous essays have appeared in Advertising Age, but his favorite recent project is the completion, with his wife Wendy, of a daughter, Emily.
If your goal is to go as far as you can into the fascinating field of aerospace technology, you'll find yourself way out in front at Lockheed Missiles & Space Company in Sunnyvale.

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In addition to our heavy involvement with major projects, Lockheed Missiles & Space offers exceptional programs to further your education. For example, our tuition reimbursement program may allow you to take graduate courses at several nearby universities. You'll also find in-house educational opportunities, many of which are graduate level audit courses via the TV network from Stanford. Taking advantage of these programs can help lead to career opportunities in virtually any area you wish. Areas such as:

**EE And Physics Majors**

Circuit design (analog and digital), communications systems, guidance and control, command and control, antennas, many microprocessor applications, microwave systems and components, electro-optics, sensor systems, signal processing, image processing, systems test and integration, RF systems, telemetry systems, radar, electromagnetics, and reliability.

**ME and AE Majors**

Design and/or analysis involving mechanical design (ranging from small scale packaging to large scale missile-handling equipment), advanced composites, structural analysis, structural dynamics, vibro-acoustics, aerodynamics, hydrodynamics, mechanisms/separation analysis, mass properties, thermodynamics, heat transfer, and loads.

- Use of Program Design Language (PDL) to describe system design.
- Automatic requirements tracing system.
- Automatic Test result comparators for validation.
- New 4341 and VAX computer center dedicated to supporting advanced design studies and proposals.


**Business Applications**

Lockheed is also completely redesigning its administrative computer applications for financial manufacturing, engineering, procurement, and logistics into an integrated database system using IMS/VS in a DB/DC environment on an IBM 3033. If you are interested in becoming a member of a highly skilled team involved in the top-down design and development of an administrative database environment, Lockheed has a position for you. We are looking for computer science graduates with experience or an interest in IBM's IMS logical or physical database design, data administration or DB/DC programming.

If you are in the above majors and would like to start at the forefront of your field, please stop by when we visit your campus this fall. If we're not visiting your campus, or if you're unable to sign up for an interview, please forward your resume and list of courses for immediate response to: College Relations, Employment Department 394-0982, Lockheed Missiles & Space Company, Inc., P.O. Box 504, Sunnyvale, CA 94086.

We are an equal opportunity, affirmative action employer. U.S. citizenship is required.
Quirks (continued from page 6)

Portance of the quirls and to begin dicing with Stretch Rabinowitz, Inc. for Soviet import rights.

The world economy continued to boom. Production doubled, and doubled again; in the United States, it was operating at 103% of capacity. As Stretch pointed out in a media interview, "The basic problem of the world is not overpopulation but underconsumption. We've solved that problem here in the U.S. but underconsumption. We've"

...continued from page 5)

The Jerk Finder

For those of you out there prone to calling in during radio talk shows to scream obscenities, lambast the d.j. or simply spout the latest intergalactic joke to let this be a warning. Your days of airing your craziness are nearing an end, thanks to a (no no, not another d.j.)

The computer-based caller selection process, known commercially as the "electronic producer," is more lovingly referred to by radio folks as "the jerk finder."

"Here's how it works: A Commodore VIC-20 microcomputer allows the person taking the calls to record certain descriptive information about the caller — for example, first name, address, age, topic of discussion — and this information is passed to the d.j. conducting the talk show, before he picks up the phone. Artful dodgers can still slip by the system, but the few stations using the process report that it helps screen out some of the real jerks.

How's That Again?

If the rock concerts, headaches, jaw pain, and other commonly occurring noises have you stuffy your fingers (or more exotic forms of plugs) into your ears without much relief, a solution may be at hand (or is that ear)?

A brand of Canadian ear plugs recently introduced into the U.S. is made from cotton, oils, and wax that have been molecularly cooked, and cooled to produce a cylinder about the size of a cigarette butt (just in case you've ever stuffed a couple of those in your ears before).

The idea behind the "Hear Saver" is that when inserted into the outer ear canal, the bulge of the ear wax mold them to the exact contours of the user's ear. Whereas most ear plugs reduce loud noise by about 15 decibels, the Hear Saver provides 24 decibels of reduction.

Computer Etiquette

Computers can be right or wrong, but can they be good or bad? Apparently some of the nation's colleges think so, and are offering such courses as "Moral Issues in Computing," "Computer Ethics," and "Social and Impact of Computing."

"To be literate, students have to know how computers work and human beings," says a professor at Rensselaer Polytechnic Institute, which began a computer ethics class in 1987. A similar seminar, which has been Stock of the Month Club and Library Guild selections.

Only ten per cent of H. L. Gold's 7 million published and broadcast words are science fiction, but they include "Trouble with the Man with English," "The Biography Project," and many other classics. What's the key? "The best editor we're working for is an assistant editor, and the people around him are top-notch."

H. L. Gold has written 25 novels, most of them mysteries and thrillers, and a science fiction and one mainstream (The Cambod File, with columnist Jack Anderson). He has written 230 short stories, articles and essays and co-edited 16 anthologies of science fiction, mystery/suspense, and horror. His novel, "In the House of Old Dominica University dates into such philosophical questions as who's to blame if a computer causes a disaster.

A professor at Illinois Institute of Technology reports that his computer ethics course draws some computer-industry employees.

Meanwhile, Dartmouth College, which will offer such a course this year, requires computer science major candidates to ponder the morals of bits and bytes.

The sensitive moral and ethical questions involved in such course offerings. leave some doubt as to whether the whole idea is a good or bad one. We're running it through our computers now, and we'll let you know what it thinks.

Supercomputer Moviemaker

It's called the Cray X-MP/22 supercomputer, and it's valued at $12.6 million. But you may soon see its hardwork for a mere $5 at your local movie theater.

The supercomputer, developed by Cray Research, Inc., Minneapolis, has been leased to Digital Productions, a Los Angeles-based hi-tech moviemaker. The company specializes in creating high-quality, high-resolution film images for the entertainment, industrial, and scientific communities, using a process called "digital scene simulation."

Digital has developed software programs that allow the Cray supercomputer to generate realistic im-

The University of Texas at Austin, for instance, publishes a quarterly journal called "Discoveries. Its first circulation was recently boosted to from 8,000 by 3,000 by increasing the number of donation-prone founda-

Research Mags

A growing number of colleges are taking to the printing press as a means of getting their research news into circulation, although they're also a glossy pitch for their programs. The Lincoln University of Arizona, for instance, publishes a quarterly journal called "Discoveries. Its first circulation was recently boosted to 8,000 from 3,000 by increasing the number of donation-prone founda-

We invite your comments, opinions and information. Send mail to: "Beyond October" in care of The Editor, Box 195, Santa Fe, New Mexico 87501.
Pictured above are the rock stars selected by PLAYBOY readers as the best in their categories in last year's Playboy Music Poll. (How many of them can you identify?) More importantly, can you guess who this year's selections will be?

For a full list of nominees, a mail-in ballot, and a chance to make your vote count in this year's poll, check out the November issue of PLAYBOY at newsstands now. Also in this issue: Should College Athletics Be Abolished?, a far-out interview with Frank and Moon Unit Zappa, the beautiful ex-stews of Braniff, plus lots more. Don't miss November PLAYBOY.

In November Playboy
On Sale Now
PAYOFFS
(continued from page 10)

... and the Water Injectors which made J.C. Whitney a fortune.

And let us not forget the Wankel Rotary Engine. Developed as an alternative to the traditional piston, or "reciprocating" engine, it is based on an entirely different design principle — it has no pistons, it has rotors. One Mazda expert, who has worked on imported cars for over 35 years and prefers not to be named, explained it this way: "Both the Wankel engine and the traditional piston have combustion chambers which expand and contract, to compress the fuel.

The rotary engine combustion chambers are an elliptical, diminishing-type rotor that compresses the fuel. A piston engine has pistons that compress the fuel, that's all.

When the Wankel first came out it was ballyhooed as being the most fuel-efficient engine on the market, and the car of the future.

What happened? The mechanic just gunned naively. "In my opinion the Rotary simply doesn't have the longevity of a traditional engine, and that's all there is to it. They're not as bad, as some people make out — but not as good as Mazda's, and we don't want to make that virtue of the way they are built, they cannot seal as well as a reciprocating engine. Generally you can't break a man's seal. You can't break a man's confidence in it. So if there's a Wankel in there, they just don't seal as long.

Mazda made a bunch of crap about how they were emission free. It's horses--t. They're just as bad as a reciprocating engine, if not worse. Because they tend to run rich. It shows up under the infra-red."
NEW FABERGÉ TURBO
$130,000
SUPERCHARGED
SWEEPSTAKES

2 GRAND PRIZES: DATSUN 280-ZX TURBO SPORTSCARS
The awesome 280-ZX with the Turbocharged, 2.8 liter overhead-cam, fuel-injected engine.
Estimated Retail Value: $17,600 each

10 AKAI VCR AND AUDIO SYSTEMS
VPS-7350 portable video cassette deck, tuner timer, stereophonic sound, 6-event, 7-day programmability.
PRO-1011 matched component music system-turntable, integrated amplifier, AM/FM tuner, stereo cassette deck, speaker system. Estimated Retail Value: $2,590 each

10 APPLE II PLUS PERSONAL COMPUTER SYSTEMS
48K personal computer, monitor and disk drive. The perfect system for managing finances, education, and video games. Estimated Retail Value: $2,495 each

10 LEICA R-4 CAMERAS & LENSES
Legendary Leica 35mm camera with multi-mode operation, dual light measurement, 50 mm F2.0 reflex lens and an exceptional warranty. Estimated Retail Value: $2,175 each

3 YAMAHA SECA TURBO MOTORCYCLES
With a Turbocharged, 650 cc, four-cylinder engine that performs like an 1100. Estimated Retail Value: $5,000 each

500 TURBO GIFT SETS
Turn it on with a 1 oz. bottle of Turbo Cologne and Turbo Stick Deodorant.

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