ABALONE ALLIANCE NEWSLETTER

FBOUT TIMES



SPECIAL WEAPONS ISSUE



A few of the 300,000 American soldiers, airmen, sailors and civilians exposed to radiation during atmospheric testing of nuclear bombs. This is a test in the Pacific during the mid-1950's. Los Alamos Photo Library

What is Trident?

The Trident submarine and missile system is unnecessary, excessive and a dangerous stimulus to an already suicidal nuclear arms race. At present the USA has over 9,000 strategic, long-range nuclear weapons, more than enough fire power to devastate every city in the USSR with a population of over 20,000 many times. Our current stockpiles more than amply serve as a deterrent force which would dissuade the Soviet Union from any nuclear attack.

Trident will only serve to make the current "balance of error" even less stable.

Attempts by the USA to remain superior in nuclear weaponry have resulted in technological advances which are escalating the dangers of a nuclear holocaust. The USA is perfecting guidance systems to destroy military targets (missile silos, air bases, command headquarters, etc.), as well as anti-submarine warfare, anti-ballistic missile systems, and advanced communications to create the capacity for a "pre-emptive" or "disarming" nuclear first-strike against the Soviet Union.

In time the USSR will develop similar systems, forcing a situation in which, during a crisis, both superpowers will be tempted to initiate attack rather than risk being the victims of a massive first-strike.

The logic of deterrence will have been undermined and the human race brought one clear step closer to a nuclear war of unimaginably devastating proportions.

Our survival depends on our ability to cooperate and live together rather than to intimidate one another. A

spiraling nuclear armaments race is now contrary to the best interests of the USA and the USSR, both in terms of possibly leading to an unwanted nuclear war, and because of its debilitating effect on both economies.

We will have to abolish nuclear weapons or they will be used because of accident, inadvertence, desperation, stupidity or sheer lunacy, to destroy us.

The most destructive weapon in history.

Trident is the Navy's plan for updating the sea leg of the U.S. strategic nuclear forces. Trident will be a fleet of 29 submarines each costing upwards of \$2 billion, plus billions more for support vessels, bases, an exotic communications system, and maintenance of the system.

The Trident II Missile (or D-5 according to Lockheed jargon) will equip each submarine with 300-400 nuclear warheads, each capable of striking within 30 feet of its target from 6,000 miles with an explosive force 5-10 times more powerful than bombs used against Hiroshima and

Any Trident submarine is capable of devastating the USSR from thousands of miles away in a mere 15-30

Trident is a first-strike nuclear weapon.

Pinpoint-accuracy, ocean-crossing range, miniaturized warheads, and increased explosive impact will enable the warheads of Trident II missiles to hit and destroy the missiles of a foreign nation in their reinforced silos. It makes no sense to destroy silos after the missiles have been launched. Such accuracy and impact is not necessary to destroy population centers or industrial complexes, the heart of a deterrent policy.

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Inside...

The Day the Bomb Went Off Games Governments Play	2 -
	4 - !
Living under the Mushroom	6 -
Short Circuits	9
Corporate Lies Den't	12

HIS month, It's About Times departs from its usual format to present a special eight-page section on nuclear weapons. Other news and features follow this section.

In August, 1945, the nuclear age began in pain and horror with the destruction of two Japanese cities. In the thrity-four years since, we have come to tolerate a vast military-industrial machine in our midst - a machine that siphons off our resources and produces only the devices of mass death.

The United States now has 30,000 nuclear weapons - equivalent to eight billion tons of T.N.T. These figures numb the mind and stagger the imagination. But the momentum of the military machine keeps building. It builds Missile-X and Trident in the name of security, and we grow ever less secure in an increasingly deadly world.

Individually, we can do little but despair. Collectively, we have the power to act. Stopping the arms race is undeniably difficult, and may require transforming the political and social structures that support it. But we cannot build a free society on nuclear ruins.

In late October, Live Without Trident will sponsor demonstrations against the Trident submarine and missile system, one of the latest "improvements" in the technology of mass destruction. In November, the Abalone Alliance and the UC Nuclear Weapons Labs Conversion Project will co-sponsor a series of teach-ins exploring the connections between nuclear power and nuclear weapons, and ways of halting both. We hope this issue of It's About Times will encourage interest and participation in these events.

Tailing Dam Disaster

An earthen dam gave way on July 16 near Grants, New Mexico, causing the worst spill of radioactive water in the history of the United States. The failed dam at United Nuclear-Homestake's uranium mill released 100 million gallons of radioactive water and 1,100 tons of radioactive metal sludge into the Rio Puerco, a tributary of the Colorado River. Although the river is dry most of the year, its banks nearly overflowed on July 16.

Officials in New Mexico have stated that 250 acres of land and 50 miles of the river are contaminated for an undetermined period of time. The Environmental Improvement Division (EID) has posted signs in English, Spanish and Navajo warning local residents to keep themselves and their livestock away from the Rio. "We've issued press releases on the water contamination," said an EID representative, "but unfortunately cows don't read."

This disaster appears to have had minimal impact on either the media or national uranium production, though it may have consequences much more severe than the Three Mile Island accident. United Nuclear-Homestake - which, with other uranium firms, expects to open 75 new mines and 20 new mills in that part of New Mexico over the next decade - was forced to temporarily close down this mill, since the 180 mill workers are busy cleaning up the spill. The UN-H mine continues operations, with ore being stockpiled at the mouth of the mine. UN-H vice president Tom Kilrov reported, "We still don't know how long it will be before we reopen," adding that it all depends on how the state accepts the company's technical explanation of the failure.

- Black Hills Report, August 1979 (available from P.O. Box 2508, Rapid City, S.D. 57709, 605-342-5127. Subscription rates, \$5 per year.)

THE DAY THE

Erwin Knoll and Theodore A. Postol

It was a sunny summer morning in the Chicago Loop. The usual bumper-to-bumper jam of cars and trucks. On the sidewalks, the usual crowd of shoppers, tourists, messengers, office workers heading out to an early lunch. It was Friday.

At 11:27, a twenty-megaton nuclear bomb exploded a few feet above street level at the corner of LaSalle and Adams. First the incredible flash of light and heat: in less than one-millionth of a second, the temperature rose to 150 million degrees Fahrenheit — more than four times the temperature of the center of the sun.

The roar followed immediately but there, in the center of the city and for miles around, no was left to hear it. There was only the heat. And the dust.

Imagine that it happened. We will not speculate here on why it happened — on whose fault it was, on the series of diplomatic bluffs and blunders and miscalculations here and there that made it happen. It happened.

Even in the macro-magnitudes of nuclear weaponry, a twenty-megaton bomb is large — the equivalent of twenty million tons of TNT, though such comparisons have little meaning. The yield of a twenty-megaton bomb is some 1,500 times greater than the yield of the bomb that was dropped on Hiroshima thirty-three years ago.

The United States does not admit to deploying any twenty-megaton bombs in its nuclear arsenal. With its superiority in missile numbers and missile accuracy, the United States prefers weapons of lower yield. But the Soviet Union's 200 SS-9 intercontinental ballistic missiles are believed to carry warheads in the twenty-megaton range, and they — along with lesser bombs — are presumably targeted on the fifty largest cities in the United States.

In the event of nuclear war, a total of some 100 to 200 megatons would be directed at a metropolitan area like Chicago's.

The bomb that exploded in the Loop left a crater 600 feet deep and nearly a mile and a half in diameter. The crater's lip, extending almost to the shore of Lake Michigan on the east, was 200 feet high and would be, after the cloud of radioactive debris and dust had settled or dissipated, the tallest "object" visible in the area of the blast.

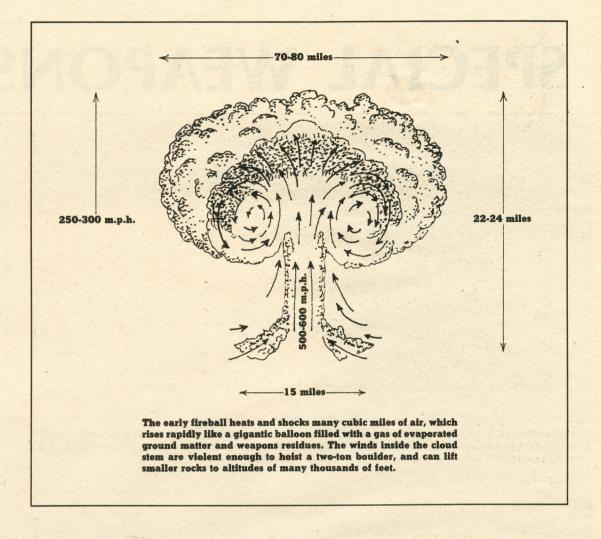
For the moment, though, there was just the incandescent fireball, rising and expanding outward at enormous speed, reaching a height and breadth of three or four miles, illuminating the sky, so that 100 miles away, over Milwaukee, the flash blinded the crew of a Chicagobound airliner.

Around Ground Zero, everything — steel-and-concrete skyscrapers, roads and bridges, thousands of tons of earth, hundreds of thousands of people — was instantly evaporated.

At the edge of the fireball, a thin shell of super-heated, super-compressed gas acquired a momentum of its own and was propelled outward as a blast of immense extent and power, picking up objects from disintegrating buildings, snatching huge boulders and reducing them to vapor that would solidify, eventually, into radioactive dust.

Three seconds had elapsed since the bomb went off.

A high-altitude blast at one to three miles above ground level would have inflicted considerably greater blast damage, but the surface blast has its own "advantage": By maximizing the amount of debris sucked up in the nuclear explosion, it multiplies the long-range radiological effects, threatening the survival of living things hundreds of miles from the target area. And even the blast radius of a surface detonation is powerful enough to ignite fires more than twenty miles from Ground Zero — more than thirty miles if clouds help to reflect the flash.



Within a minute, the familiar shape of the mushroom cloud began to form over Chicago, symmetrical and strikingly beautiful in various shades of red and reddish brown. The color was provided by some eighty tons of nitric and nitrous oxides synthesized in the high temperatures and nuclear radiations. In time, these compounds would be borne aloft to reduce the ozone in the upper atmosphere.

The mushroom cloud expanded for ten or fifteen minutes, reaching a mature height of twenty to twenty-five miles and extending seventy to eighty miles across the sky.

To a distance of five miles from Ground Zero — to affluent Evanston on the north, well past working-class Cicero on the west, beyond the University of Chicago campus on the south, there was — nothing. A few seconds after the bomb went off, the fireball appeared, brighter than 5,000 suns. Those who saw the sudden flash of blinding light experienced instant and painless death from the extreme heat long before the noise and shock wave reached them

Glass melted. Concrete surfaces disintegrated under thermal stress. Anything combustible exploded into raging flames. Even reinforced, blast-resistant structures collapsed, along with highway spans and bridges.

The blast wave arrived about fifteen seconds later, buffeting the few man-made remnants that had not been pulverized. With the shock came torrid wind, traveling at some 300 miles an hour, carrying dust and embers and fragments, blowing down vents and tunnels to suffocate the few surviving human beings who had been sheltered below ground level.

After about ten seconds, the wind reversed direction, drawn back toward Ground Zero.

The enormously high temperatures from the fireball of a nuclear weapon generate enough light and heat to ignite simultaneous fires over huge areas. In these areas the heated air forms a rising column, resembling on a vast scale the air-flow in a fireplace. Cool air drafts into the fire zone to replace the rising hot air. As the fires gain strength, burning hotter and more violently, sucking in more air and causing the fire to burn hotter still.

About twenty minutes after the atomic bomb attack on Hiroshima, a mild wind began to blow from all directions toward the center of the city. Within two or three hours, the wind developed a speed of thirty to forty miles per hour and air temperatures rose steadily toward 2,000 degrees Fahrenheit as fires burned out of control for a distance of 1.2 miles from Ground Zero. The wind was accompanied by light, radioactive rain over the center of the city, and heavier rain around the periphery. It was a firestorm, and it destroyed about 2,800 acres.

A twenty-megaton bomb could, under similar conditions, generate a firestorm that would devastate an area some 500 times larger.

On the freeways radiating from the Loop, automobiles, trucks and buses were simultaneously evaporated and blown away, their particles sucked up into the fireball to become components of the radioactive cloud.

Along the Stevenson Expressway, some seven or eight miles from Ground Zero, scores of oil storage tanks exploded — ruptured by the shock wave and then ignited from the grass and shrubbery burning around them.

At this range, too, aluminum siding on homes evaporated and some concrete surfaces exploded under thermal stress. The few buildings still standing were in danger of imminent collapse — and all were engulfed by flames. Highway spans caved in. Asphalt blistered and melted.

Clothing caught fire, and people were charred by intense light and heat. Their charcoal limbs would, in some instances, render their shapes recognizably human.

With greater distance from Ground Zero, the effects diminshed. About ten miles from the Loop, in the area around the Brookfield Zoo, the fireball was merely brighter than a thousand suns. Glass did not melt, but shattered window fragmets flew through the air at about 135 miles per hour. All trees were burning even before the shock wave uprooted most of them.

Railroad bridges collapse, and railroad cars were blown from their tracks. Automobiles were smashed and twisted into grotesque shapes. One and two-story wood frame homes, already burning, were demolished by the shock wave, which also knocked down cinderblock walls and brick apartment buildings.

Those who had taken shelter underground — or, more probably, just happened to be there — survived for fifteen minutes or a half hour longer than those who were exposed. They suffocated as oxygen was drawn away by the firestorm that soon raged overhead.

Arms Race Frontrunners

Nuclear weapons production has been a virtually recession-proof industry for the 27 years the United States has been engaged in it on a large scale. Business is now picking up. On November 19, 1978, the Pentagon launched "its most ambitious nuclear weapons production program in two decades," according to *The Washington Post*. Private industry is doing its duty in this effort, in a competition-free atmosphere of guaranteed profit.

Rockwell International ("Where science gets down to business") fabricates plutonium and beryllium bomb components at the Rocky Flats plant in Colorado, outside of Boulder. The plant is owned by the government, but operated by Rockwell, a typical pattern for the industry. Union Carbide ("Today, something we do will touch your life") builds uranium bomb components at another government plant, the Y-12 plant in Oak Ridge, Tennessee. Non-nuclear electronic and mechanical bomb parts are made by the Bendix Corporation ("We speak technology"), at a government factory in Kansas City, Missouri. The explosive detonators that trigger the bombs are manufactured by Monsanto ("Without chemicals, life itself would be impossible") at Mound Laboratory, near Dayton, Ohio. The General Electric Company ("Progress for people") builds neutron generators at its Pinellas plant in Florida.

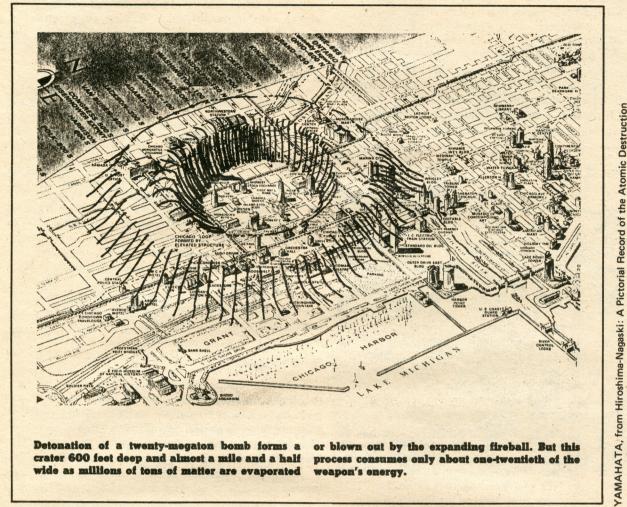
All these components come together near Amarillo, Texas, where a company named Mason & Hanger-Silas Mason,

Inc., assembles them into completed nuclear weapons at its Pantex plant.

Designs for the weapons come from the scientists at the Lawrence Livermore Laboratory in Livermore, California, and the Los Alamos Scientific Laboratory in New Mexico. Both labs are operated by the University of California ("Let there be light"). Weapons are also designed in New Mexico at Sandia Laboratories, operated by the Sandia Corporation, a subsidiary, of course, of American Telephone and Telegraph.

—Eric Mankin Mother Jones, July, 1979

BOMB WENT



crater 600 feet deep and almost a mile and a half process consumes only about one-twentieth of the wide as millions of tons of matter are evaporated

Detonation of a twenty-megaton bomb forms a or blown out by the expanding fireball. But this

Nagaski, August 10. about 2.6 kilometers from the blast center. This girl was saved by an air raid shelter beside her house.

At O'Hare Airport, the world's busiest, aircraft engaged in landing or takeoff crashed and burned. Planes on the ground were buffeted into each other and adjacent hangars, their fuselages bent and partially crushed by the shock wave. Some thirty seconds before the shock wave struck, aluminum surfaces facing the fireball had melted and the aircraft interiors had been set aflame.

The enormous temperatures associated with all nuclear weapons, regardless of yield, result from fission - the process in which certain atomic nuclei become unstable and disintegrate. (Even a fusion bomb like the one here described gains about half its energy from fission.) As the nuclei break up and form new atoms, they yield neutrons and immense amounts of energy. The atoms created by fission are so radioactive that if one could collect two ounces of them one minute after their creation, they would match the activity of 30,000 tons of radium and its

When a twenty-megaton nuclear bomb goes off, it produces more than half a ton of this material. One minute after detonation, it is as radioactive as thirty million tons of radium. Though this radioactivity declines within one day by a factor of 3,000, the material still has the radioactivity of 10,000 tons of radium.

The astronomically hot fireball indiscriminately incorporates all those materials into a super-heated gas and mixes them with millions of tons of earth and target debris. The mixture condenses into droplets of liquid and then solidifies into particles ranging in diameter from one-thousandth to one-fiftieth of an inch. The particles incorporate all of the extremely dangerous radiological are borne aloft to deliver death hundreds of miles from the target.

In addition, many neutrons escape the exploding weapon to be absorbed by the earth and air in the immediate blast area. This leads to the production of a wide variety of neutron-activated radioactive isotopes of such elements as sodium, chlorine, manganese, zinc, copper and silicon, as well as radioactive carbontransmuted from nitrogen in the air.

All of these substances, dangerous to varying extents, remain active in the blast area to jeopardize survivors and would-be rescuers.

In the pleasant western suburb of Hinsdale, some sixteen miles from the Loop, the manicured lawns surrounded by wooden picket fences on tree-shaded Chicago Avenue caught fire first. Leaves in the trees ignited next, and then the picket fences themselves. Paint evaporated off the house exteriors. Children on bicycles screamed as they were blinded by the flash of the fireball. An instant later, their skin was charred. Autos collided as their tires and upholstery burst into flame.

The white wooden cupola on the brick village hall blazed, and even the all-stone Unitarian Church on Maple Street was burning - ignited by the curtains on the windows facing east.

The shock wave arrived some fifty seconds later, tearing the roofs off houses, blowing in side panels, spreading burning debris.

At about the same distance north of the city, Ravinia Park's summer festival was to have featured an all-Mozart program that Friday evening. There would be no Mozart and no Ravinia Park. By 11:30 a.m., that agreeably green place was a burning wasteland.

About twenty-one miles southwest of the Loop, the Argonne National Laboratory sprawls on some 1,700 acres of park land. Its 5,000 employees had engaged in a broad variety of research efforts, many of them centered on the development of nuclear power. Argonne and its predecessor, the Metallurgical Laboratory of the University of Chicago, were instrumental in developing the atomic bomb.

Argonne researchers who happened to be looking out a window on that Friday morning - gazing, perhaps, toward the Sears Tower barely visible on the skyline to the northeast - suddenly saw a flash that filled the sky with the brightness (from their vantage point) of fifty to eighty suns. They were blinded, their clothing was ignited on their bodies, and exposed skin areas suffered extremely severe third-degree burns.

Here, too, leaves and grass and many readily

combustible materials caught fire at once. The shock wave, which arrived a minute-and-a-half later, caused only minimal damage, except as it spread burning debris. But the fires soon raged out of control, for here, as for many miles around, there was neither power nor water pressure nor emergency equipment nor any human will but the impulse to surrender to the hysteria of total

And soon after all this happened, the radioactive cloud, carried by the prevailing winds, began drifting toward the east at about twenty miles per hour.

By the time the mushroom cloud has completed its fifteen-minute process of stabilization, it is directly overhead for distances up to forty miles from Ground Zero. Fires are still burning as radioactive particles begin settling on the landscape. The radiation level rises rapidly to exceed 4,000 to 5,000 roentgens per hour, delivering a lethal dose within seven to eight minutes. Individuals driven out of doors by fire are directly exposed.

Within an hour or so, elements of the cloud begin to arrive about forty miles downwind. The density and activity of the particles is such that a belt four to five miles wide quickly develops radiation levels of more than 3,000 roentgens per hour. By this point, activity is diminishing, so that it requires an exposure of ten to twenty minutes to absorb a deadly dose. Within a larger belt, up to ten miles wide, fewer particles are falling, allowing up to a half hour's exposure before a fatal dosage is absorbed.

of the Atomic

A Pictorial

As the cloud moves downwind, expanding and dropping particles, the fallout level becomes unpredictable, though it remains, in many places, extremely high.

No one knows how many Americans might die from blast and fire and radiation sickness in a nuclear attack. Casualty projections are a matter of heated controversy within the Government and outside it. A reasonable conjecture is that an all-out nuclear attack might claim 160 million lives - about three quarters of the population. In a particularly strategic concentrated metropolitan area subject to a direct strike - Chicago, for example - virtually the entire population could be expected to perish.

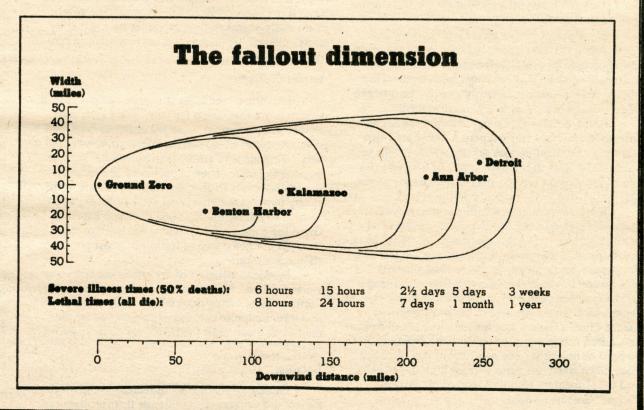
But American casualties would, of course, not be the only ones. No matter how it happened or whose fault it was, there would be counterstrike, and the indiscriminate murder of one nation's citizens - ours or theirs - would be avenged by the indiscriminate murder of the other's.

Moving slowly to the east, Chicago's radioactive cloud brushed Indiana and was blown into Michigan, dropping silent death along the way, drifting inexorably toward Detroit. But it didn't matter, for at a few seconds before 11:27 that Friday morning, a twenty-megaton bomb had exploded in Detroit, too.

-This article first appeared in The Progressive for October, 1978. Erwin Knoll is the editor of The Progressive. Theodore A. Postol is a physicist and nuclear enginner on the staff of the Argonne National Laboratory. He is a member of the Chicago Committee for a Nuclear Overkill Moratorium (NOMOR).

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Nuclear Strategies: Games

Daniel Ellsberg on Nuclear Strategy

The excerpts below are from a talk given by Daniel Ellsberg at La Pena in Berkeley on March 23, 1979.

What kept the administration of Richard Nixon dropping high explosive bombs on Vietnam? Why did it go on so long? I don't think you'll hear a thoroughly satisfying answer, but H.R. Haldeman gives a major part of the answer in his memoirs, and I think it's significant that his relevation has been totally, 100% ignored.

Haldeman says, and Nixon's memoirs confirm, that Nixon intended and expected to win the war, at first within one year, and later by the election of 1972. But how? Haldeman reveals that Nixon's secret plan to win the war was to threaten the immediate use of nuclear weapons by the U.S. And that he made those threats through Kissinger to the North Vietnamese, the Chinese and the Russians.

In his own memoirs, Nixon says that he had made what he called "my November ultimatum" to escalate the war if Northern Vietnamese troops were not withdrawn from the southern part of Vietnam by November 1, 1969. Nixon doesn't say what he threatened, just that he would do things that Johnson had never done. In the context of Haldeman's relevations, it becomes very clear what that threat was, and just why Nixon thought he had a way to win the war, a way good enough to keep him at it until 1975...during which time he dropped 4½ million tons of bombs, twice the tonnage of World War II.

A History of Nuclear Threats

When I discovered that threats of that magnitude had been made, I began to look very seriously at previous threats. The list that exists in the available literature now, some of which has only recently been declassified, looks like this: 1950, Harry Truman in Korea; 1953, Eisenhower in Korea; 1954, Eisenhower at Dien Ben Phu where we offered the French three nuclear weapons; 1955, the Tachen Islands, offshore islands in the Taiwan Straits; 1961, the Laos crisis under Kennedy and also Berlin; 1962, Cuba; 1968, Khe Sanh, where Westmoreland had the use of nuclear weapons under study and believes that we should have used them and that we missed the great opportunity of the war; and now Haldeman adds 1969 through 1972 in Vietnam.

Since the bomb was invented, every term of every president, Democrat or Republican, has seen serious consideration of the imminent first-use by the

United States of nuclear weapons. Tactical, first-use -not without risk, because in every case, those people
had allies (the Soviets or the Chinese) who could have
replied. We were pretty confident they wouldn't because we outnumbered them in strategic warheads -at some stages 100 or 150 to one. So we had the ability to say to Russia or China: If you make it a twosided exchange in support of your ally, we'll blow
you off the map. Our threats were successful in South
Korea, Taiwan and Berlin, but unsuccessful in Vietname and Cuba

A Game of Chicken

The U.S. doesn't have the capability to threaten that very credibly today. You can make the threat of local, tactical first-use out of a situation of parity, which is what we have today, but obviously with more risk. It becomes a game of "chicken." Which side will back down? I believe that presidents will continue to make such threats on that basis -- in fact, Nixon's own threats were made from a position of parity but they aren't happy about it. And that's why Rocky Flats and Livermore are in full operation today. It explains why they are building weapons that everyone can see are suited and adapted for nothing but a first strike. They want to get back to the position of overwhelming superiority they had in the past so that they can make with the same assurance the threats they have already made over and over again to allies of Russia and China.

It could never be anything but dangerous to launch weapons against Russia or East Europe. But that's not who we've threatened with those weapons all these years. It's a lot less dangerous to use them against other people, even allies of the Soviets, if you look big enough to persuade the Soviets to stay out of it.

The Seamless Web

Our nuclear buildup is related above all to our imperial policy, above all in the Third World. We have had a sense of a seamless web of U.S. interest in the Third World which we have been policing first of all with economic pressures, second with covert operations -- coups, assassinations, bribery, propaganda. When that didn't work in a few places, we sent troops. And fourth, we had the threat of nuclear weapons. Hopefully, you don't have to use them, but we've had a readiness to use them if necessary, backed up by a readiness to hit Russia if they made trouble.

The troop part is less available after the debacle of Vietnam. That has put more pressure on the coups

and assassinations, and even that's under attack. So we go back to the fifties and say nuclear weapons have to make up the difference. In short, the production is to go on, the uranium mining which itself kills people is to go on, so that the plutonium can be fashioned into bombs -- another process that kills people as it happens.

What Goes Up Can't Come Down

This is a way of handling our problems which of course precludes disarmament or unilateral reduction. If you're going up, you can't go down, and that's almost the worst thing about going up. That may sound like a truism, but consider it once again. People can see that we're going up, but they think it's just a marginal addition to what we already have. We can already blow up the world, so why sould we worry so much about a few more bombs?

Well, if you're making a few more bombs you have to justify that process -- the risks, the money, the fact that it makes the Russians go up as well. And if you're doing that, you can't do the other thing that has to be done if humans are to survive. And *that* is to explain why we have to go down. You can't explain them both at the same time.

Nixon's Anguish

Let me close by mentioning one piece of history that I alluded to earlier. In 1969, when Nixon made his November ultimatum, which Haldeman has informed us was a nuclear one, it didn't happen. That was not because our allies stopped us this time, because as far as I know they didn't even know about it. And it was not because the Vietnamese gave in, because they didn't. So what stopped it?

In his memoirs, Nixon goes in detail into his dismay: to his anguish, he couldn't carry out the threat he had made to the Russians. At the risk of losing all credibility, he couldn't carry it our for one reason: the Moratorium and the Mobilization of 1969. One million people were in the streets on October 15, 1969. Nixon's ultimatum was due to expire on November 1. His aides were predicting to him that there would be blood in the streets and the National Guard would have to be called out if he did what he was proposing to do. So he couldn't do it.

Why haven't you heard about all these threats and ultimatums? I think the real reason is so the question doesn't get raised, "Why didn't they get carried out?" That question has an answer: it's because the anti-war movement was remarkably effective, though we didn't know it. That's the big secret that has to be be kept from us.





In 1953, Dwight Eisenhower's advisers came to him with a problem. The American people, they said, were concerned about fallout from nuclear testing in the Southwest. The President had just the answer. "Keep them confused," he suggested. "Don't say anything about 'thermonuclear' or 'fusion' or 'hydrogen'." Eisenhower's advice, although revealed only recently, was well-heeded. For the last three decades, the public has been deceived about the purpose of nuclear weapons, their effects, and the nuclear capabilities of the Soviet Union.

But if deception has served the Pentagon and arms corporations well, secrecy has proven even more useful. A quarter-century after the H-bomb was invented, the government continues to claim there are atomic secrets -- and to zealously classify the thoughts of any citizen so bold as to try to prove them wrong.

Under the Atomic Energy Act of 1954, all information about nuclear weapons is "restricted" unless the government decides otherwise, even if the information is born in the imagination of a private citizen with no access to "secrets." Attempts to enforce this law have recently bordered on the absurd.

When John Phillips, a failing Princeton physics student, decided to redeem himself by designing an atom bomb, his term paper was classified. When Howard Morland, a technically untrained reporter for *The Progressive*, wrote an article on the H-bomb, the government enjoined the magazine from publishing it, and even censored legal briefs in the article's defense. When a Palo Alto computer programmer named Charles Hansen sent his guess at a bomb design to a dozen newspapers, the papers were ordered not to print or discuss it. The government was forced to back down when one paper printed his letter anyway and the elementary technical level of the revealed "secret" became obvious.

Secrecy or Security

The Uses of Secrecy

Ideas, in weapons as well as other fields, cannot be locked up forever. If Phillips, Morland, and Hansen -- who were by no means experts -- can figure out basic weapons designs, then many people with more training can calculate the details. The real secret of the Bomb is that there is no secret.

Why, then, is the government going to so much trouble to protect "secrets" which are already out? Or is it the *atmosphere of secrecy* which the government really wishes to protect, rather than actual secrets? Several "advantages" of secrecy seem to support this view.

Instant Credibility

In politics, credibility is usually based on being able to prove that claims are true. But a system of secrecy can present unsupported claims as facts, and then assert that all supporting information is "classified." Anyone who attempts to expose the supporting data to public review is portrayed as a security threat who wants to give vital national secrets to the enemy (witness the attacks on Daniel Ellsberg when he tried to release the classified Pentagon Papers.) Given the choice between taking the word of the "experts" or being seen as traitorous, most politicians choose the former.

Dissident members of the public are in an even worse position. Since they are denied access to all "official" data, they must rely on limited unclassified information to convince a public awed by the military and corporate "experts" and their powerful secrets.

Isolation

Because of the curtain of secrecy, weapons designers and workers cannot discuss their projects except with "cleared" people in the same field. This





isolation leads quickly to clannishness and feelings of superiority among those in possession of the "secrets," insulating them even further from the dissenting views of "ignorant outsiders." Institutional beliefs often arise -- e.g., that each new weapon is so terrible it will never be used -- which help justify weapons work in the minds of the workers.

The building of devices designed to inflict mass death and suffering is thus elevated from the sleazy and reprehensible business of terrorists to a seemingly innocuous exercise in scientific inquiry and precision craftsmanship. Close ties between universities and the weapons industry further reinforce this illusion of legitimacy.

Unaccountability

Just as secrecy shields the weapons establishment from political and moral criticism, it also hides the "side effects" of weapons production from public view. Classification can be invoked to prevent discussion of a radiation release, a budget item, or a contaminated worker. Local and state health officials can be denied access to plant areas. Citizens can be kept ignorant of nuclear weapons stored near their homes. All these actions, of course, are justified in the name of national security.

False Security

The government and nuclear industry would have us believe that all atomic weapons are complex and difficult to build. They claim we need only safeguard the plans and we will be safe from nuclear blackmail; that worldwide distribution of bomb materials by nuclear power programs is no problem as long as these "secret plans" are safe.

In reality, the situation is exactly the reverse.

All the bomb "secrets" in the world cannot harm us

(continued on p. 10)

Governments Play

The Pentagon Reaches for the Button

For 27 years, the United States has been bringing nuclear weapons on stage, with the avowed intention of never using them, to the point where many people have forgotten they are there. But now, both the form of weapons and the announced intentions behind them seem to be shifting in a significant way.

Robert Aldridge lives in Santa Clara, California, just up the road from the phenomenal concentration of American electronic skill known as Silicon Valley. Here, on the hazy flats surrounding the southern reaches of San Francisco Bay, are the laboratories and factories that have brought forth a revolution in thinking machinery—and are now, if Aldridge is correct, bringing forth the means for the United States to win a third world war, SALT treaty or no SALT treaty.

Aldridge, a spare, bony, intense man in his 50's, has paid the dues to discuss the subject. For sixteen years he was an engineer for the Lockheed Corporation, helping to perfect the systems that made it possible to launch missiles from submarines: first the Polaris missile, then the Poseidon. For years Aldridge shuttled between California and the Nevada nuclear-device testing range, supervising detachments of engineers enlisted for the Cold War arms race. He began to feel uneasy as a discrepancy broadened between the announced purposes of the programs he was working on and what, as an

engineer, he could clearly see they were designed to do. In 1973, after soul-searching and long consultation with his wife (he has been married 32 years), he quit Lockheed. Since then, Aldridge has been studying the shape of the American arsenal. And he has found that the trend he detected—toward an American atomic arsenal aimed not at maintaining the balance of terror, but at having the ability to start and win a nuclear war—has continued and accelerated. His book, the Counterforce Syndrome, puts forth the arguments in some detail.

The developments Aldridge emphasizes are occurring across a range of defense programs. They include:

Missile Accuracy

while the first intercontinental ballistic missiles (ICBMs) were introduced at the end of the 1950's, they could not be counted on to land closer than five miles from their target. Since then, missile accuracy has steadily improved. Presently, Minuteman III missiles can reliably drop warheads within a 750-foot-radius circle. The Missile-X (M-X) guidance system, just approved, and the proposed Trident II submarine missile systems will shave this even further. And if certain improvements now on the drawing board are incorporated, by the mid-1980's a ballistic missile fired in Hawaii theoretically could land separate warheads inside selected addresses in Boston, New York, Philadelphia, Washington and 16 other Eastern seabord cities.

Since a nuclear warhead is capable of blasting a crater up to a mile in diameter, this kind of accuracy makes as much sense as a telescopic sight on a shotgun, if the purpose of the weapon is what the United States once said was the only purpose of American strategic weapons: retaliation for an enemy attack. There is, in fact, only one kind of target for which such accuracy is necessary: someone else's missile silos. First strike, not retaliation.

Anti-Submarine Warfare

The submarine-launched ballistic missile is presently the ultimate weapon. It may not be for long, at least for the Soviet Union. Improvements in our navy's Sound Surveillance System (SOSUS), a network of supersensitive underwater listening posts, have made it possible to track every boat in the ocean, when conditions are good. Improvements now in development, according to Aldridge, should make it possible for the U.S. Navy to know by the mid-1980s, under all conditions, where every Soviet submarine is. This would put the navy in a position to sink them all, simultaneously—a prerequisite for an American first strike.

At the same time, the United States' submarine force is becoming steadily more formidable. Now going into operation is the Trident system—bigger, faster, quieter subs equipped with much bigger, longer-range, more powerful, more accurate missiles. Each Trident submarine will carry anywhere from 168 to 408 nuclear warheads. Protests against the Trident notwithstanding, the U.S. may build as many as 30 of these craft by the mid-1990s.

Civil Defense

Once again, government plans are afoot for civil defense programs. The emphasis is shifting from the 1950s-style, run-for-cover-under-your-desk shelter program, to plans for the evacuation of entire cities. The crucial comparison here is between the time required for evacuation (visualize rush-hour traffic) and the flight time of a missile traveling at 20 times the speed of sound (10-30 minutes). Evacuations make no sense unless you are planning on fighting a war, not deterring one.

All of these developments are accompaniments to a basic change in American defense policy. For years, during the Cold War, the official United States policy was "massive retaliation." American forces were to sit out any



first strike by an adversary (i.e., the USSR) and still, in a second strike, inflict fatal damage. What this doctrine implies is that American missiles would be targeted on Soviet cities, not on Soviet missile-launching silos and airfields, since, as Aldridge puts it, "it does not make sense to retaliate against empty silos."

As American missile accuracies have increased, the targets of our missiles have changed. The beginnings of this policy shift were apparent in 1974, when then-Secretary of Defense James Schlesigner announced a new plan for "restrained" attacks against selected Soviet missile emplacements: counterforce strikes. That Schlesinger was not merely speaking for the Nixon adminstration became apparent this year, when Defense Secretary Harold Brown, in his annual report, explicitly stated that the historic doctrine of massive retaliation "was no longer credible."

Instead, Brown said, the United States "should be able to cover 'hard' targets (a "hard" target is one protected against blast, such as a missile silo) with at least one reliable warhead with capability to destroy that target."

To remove any ambiguity about precisely what "hard" targets were on the hit list, Brown went on to lament the fact that, presently, the United States doesn't have "high confidence of destroying a large percentage of Soviet missile silos and other hard target with ballistic missiles."

There has been one change from the Nixon/Schlesinger/Kissinger years. This strategic defense policy is no longer called a "counterforce strategy." The new name is "countervailing strategy.' Apart from the incongruity of this policy in the administration of a president who, as a candidate, set an end to nuclear weapons production as a goal, little seems to have changed.

There is one problem with the "counter..." use of nuclear weapons. It cannot win a war. "We are talking about successive bombardments," Brown said, "delivered by long-range missiles and bombers with nuclear weapons, weapons that are capable of destroying targets and producing large amounts of lethal radiation, but quite incapable of holding or occupying territory, or even of blockading it."

Overcoming the Deficiency

Your tax dollars are now at work attempting to remedy this deficiency. In Los Angeles and in Virginia, think tanks under government contract are trying to figure out if there is some special combination of Soviet targets whose destruction would bring about desirable (from the American point of view) political effects. "We have never really thought the thing through," a Pentagon thinker explained to *The Washington Post*. One plan being explored is "employing strategic nuclear weapons to achieve regionalization of the Soviet Union." This would be analogous to a Soviet plan to use nuclear weapons to resurrect the Confederacy.

Another bright idea, now being mulled over in Virginia, is to figure out a strike pattern that would kill the Soviet leadership and presumably leave the Soviet state flailing helplessly. Similarly, in California, a group called Analytical Assessments Corporation (4640 Admiralty Way, Marina del Rey 90291, [213] 822-2571) is trying to find a way, with the right kind of bombing, "of bringing about the collapse of the Soviet government that now exists, but without massive destruction of the country."

SALT II will change almost none of this, whether or not it is ratified. Right now, our strategic arsenal includes about 10,000 warheads. Even if the agreement is signed, weapons programs now underway would, without violating it, add thousands of new warheads to this figure. This is, indeed, planned, and the fact that SALT II won't interfere is being used as one of the agreement's selling points. Still, in direct terms of the arms race, the question of whether or not the U.S. ratifies the treaty is much less important than the question of whether or not the United States goes ahead and builds the M-X and the Trident missile systems, which the Carter administration is already committed to doing.

Comprehensive Test-Ban Treaty

While the press noise is focused on SALT II, far more important in the long run is the comprehensive test-ban treaty, which would eliminate all underground testing of nuclear weapons—which is to say, all testing. Such tests are essential for developing new weapons. The treaty, which has been 20 years in negotiating, is finally ready for ratification. The Soviet government, after long resistance, yielded on key issues. It is now ready to allow the setting up of seismic-monitoring apparatus to guard against possible cheating and to allow on-site inspection of the sites of suspicious, small seismic events. The Senate isn't scheduled to even discuss the test-ban treaty until after SALT—sometime in 1980, perhaps even later—unless much more pressure is applied than has been apparent so far on the nuclear disarmament issue.

There seems to be at least a chance that this will happen. In the past four years, political resistance and civil disobedience has slowed the introduction of nuclear power plants to a crawl. As more people are thinking about the issue of nuclear power—and events like Harrisburg—the corollary between reactors and bombs is becoming increasingly obvious.

The United States is now in the process of flight-testing the new Trident missile. More accurate Minuteman warheads and the M-X missile are on deck. The bomb factories are running at capacity.

In Catch-22, the bombadier Yossarian realizes that his enemies, his most deadly enemies, are not the crack flakgunners of the German anti-aircraft battery, but his superior officers and his national leaders. Simone Weil said the same thing when she wrote that modern war has become a conspiracy of national leaders against the civilians of the two warring countries. The ICBM has made us all Yossarians.

-Eric Mankin

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A Brief History of the Bomb

"I worked on the bomb because everybody I knew was doing it," commented one of the workers on the first atomic bomb. This attitude contrasts with that recorded in history books and articulated by J. Robert Oppenheimer, the man in charge of civilians working on the "Manhattan Project." "Almost everyone knew that his job, if it was achieved, would be a part of history. This sense of excitement, of devotion and patriotism in the end

What would compel scientists to work on a bomb that would later kill and injure thousands of people, generate an arms race that would wreak havoc on the economy, and strengthen corporate and military control of our national priorities?

Some scientists "found comfort in the hope that some insuperable obstacle might demonstrate the impossibility of an atomic weapon." Others worked to prevent the Nazis from developing the bomb first. But the war in Europe was over before the bomb was ever tested.

Research in fission had been going on before the war, but military work started after Albert Einstein wrote a letter to President Roosevelt in 1939 describing the possibility of developing a nuclear weapon—a decision Einstein later regretted. A crash development program, driven by fears of a Nazi lead, was begun. Facilities to work on the project were built in various parts of the country. \$2 billion was spent on the top-secret project. The main facility was in Los Alamos, an isolated, secret town in New Mexico.

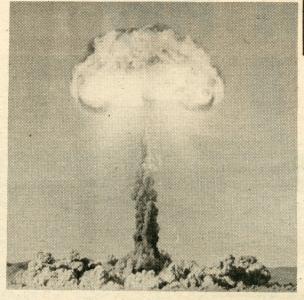
The Birth of the Atomic Energy Commission

The infatuation with nuclear weapons and research continued after the war. Leaders in the Manhattan Project had visions of building still bigger and better bombs. Edward Teller not only wanted to build a much deadlier and destructive Hydrogen bomb, he also had visions of using bombs for "humanitarian" purposes. Bombs could be exploded underground, and the heat generated could be piped into homes. Bombs could dislodge oil and natural gas from hard to access areas, and finally, serious consideration was giving to using atomic bombs to build a new Panama Canal.

Dissident scientists were not well received. Their phones would be tapped, or a shadow might join them in their work. The first Chairman of the Atomic Energy Commission, David Lilienthal, characterized scientists refusing to participate in weapons research as a "grave and ominous situation" threatening "immediate

stagnation of AEC enterprises."

Sharing knowledge of the workings of the bomb with either the United Nations or the Soviet Union was advocated by a number of scientific committees. It was felt atomic information couldn't be kept secret anyway, and the Soviet Union could easily develop a bomb in five years from public knowledge that existed before the war. It was argued that U.S. secrecy would make the Soviets fearful and a massive arms race would begin. But the government obsession with secrets became more and more extreme as postwar anticommunism grew.



On July 15, 1945 the first bomb was tested. Upon seeing the first explosion Enrico Fermi (who died of cancer less than 15 years later) "...felt as though [I] had been privileged to witness the birth of the world—to be present at the moment of creation when the Lord said: 'Let there be light." Scientists shook hands and slapped each other on the back. Some, however, were not so elated. Oppenheimer reflected, "We physicists have known sin."

Three weeks later the bomb was dropped on Hiroshima, leveling 4 square miles of the city, and bringing to death or injury 160,000 people. Three days later a second bomb was dropped on Nagasaki.

Japan was not warned of the impending attack, nor were her peace overtures acknowledged. Donald Hughes, one of the men who served on the Interim Committee that advised Truman to drop the bomb on Japan, later wrote, "We felt that if the war ended before the bomb was used there would be little attention paid to atomic energy and a post war economy might stop the development.

Scientists Dissent

Many scientists had petitioned both Roosevelt and Truman not to use the bomb, or to at least give a demonstration explosion to Japanese leaders first. After the bomb was dropped, they questioned continued development of the weapon. Some left weapons research all together.

The question remained, who would control this "valuable" resource? Previously the military controlled the research effort. The May-Johnson Bill introduced after the war asked for a nine person commission to control all aspects of nuclear development. The military would be allowed to fill these positions. The Bill was not well received and Congressperson May would later serve time in prison for illegal disbursement of defense

The Atomic Energy Commission was created with the passage of the McCarum Bill. Control of the bomb was supposed to be taken away from the military and put in "civilian" hands, with a joint-congressional committee established to oversee the commission.

Enter Department of Energy

Our country's energy choices are perverted in a basic and growing way by the dominance of military and corporate priorities in the Department of Energy (DOE). The old boys' club of weaponeers and corporate heads who made up the original AEC and their self-selected heirs have remained solidly in control of all decisions concerning nuclear materials in the US. What is more disturbing, they have increasingly garnered power through the years over all energy decisions.

In 1974, President Nixon created the Energy Research and Development Agency to replace the AEC. This Agency had jurisdiction over all decisions relating to nuclear materials and also over much of the energy research in the country. This was a step towards the nuclear framework within which energy choices are made today. Because of the public concern over nuclear power, the NRC was created the same year to "independently" regulate nuclear power.

In 1977, a far more ominous decision was made. President Carter and Congress created a cabinetlevel agency, the Department of Energy (DOE), to oversee all nuclear weapons work and all energy matters. This colossus was headed by James Schlesinger, ex-defense secretary, ex-CIA head, ex-RAND fellow and former member of the AEC. Consolidating more than 50 agencies and given a start-up budget of \$10.6 billion, the DOE was charged with the research, development, pricing, transportation and safety regulation for nearly all of the nation's energy resources.

The weapons priorities, the corporate priorities, and the nuclear priorities of the DOE have been manifested from the beginning. Criteria are established for which energy research will be funded. These include the need for energy work to "complement" the nuclear weapons work of the DOE. (From 'The Multiprogram Laboratories' GAO Study, May 1978.) Officials are proud of the "synergistic connection" between weapons and power work. What this means is that many programs (such as laser fusion) are touted as energy hopes for the future while in reality they are funded for their weapons applications. In the words of Rep. Ottinger of New York, "What comes up through the DOE to us is a lot of huge dollar proposals to extend the work in these very high capital-intensive, high-technology fields. When it comes to solar, we have to be the instigators, or when it comes to fuel cells, or when it comes to other alternate technologies."

Such is the sterling track record of the official guardian of America's energy future. The fiscalyear 1980 budget request included \$5 billion for nuclear weapons, \$3 billion for nuclear power, and \$700 million for all other alternate research.

There is no reason to expect that the powers that be in America today would make decentralized, renewable, or sane energy choices. But the weapons/energy coupling we currently see is possibly the worst way imaginable to organize energy resources. Charles Duncan, the ex-DOD official replacing Schlesinger at the DOE is bringing so many of his deputies and aides with him that the move is being dubbed by insiders in Washington as "the Pentagon takeover of Energy." Not surprisingly, Duncan recently reaffirmed his commitment to a nuclear future for America.

The DOE bill signed in October of 1977 calls for a mandatory, "comprehensive" review of the structure and programs of the DOE "within five years." Anti-nuclear power & weapons activists are beginning to gear up for a call for citizens' hearings on the distorted priorities of the DOE, the coupling of weapons and power, the secrecy and the abuses of power in the DOE. This issue is a crucial one for bringing nuclear weapons & power activists together.

For more information on involvement, contact Diane Thomas-Glass at Ecumenical Peace Institute, 944 Market St, Room 509, San Francisco 94102, 415-391-5215.

- Diane Thomas-Glass

Living Under the N

Corporate Family Decisions

Major corporate families were a part of the planning and decision making process of the nuclear weapons program from the beginning. The Morgans, Rockefellers, Mellons, and du Ponts all shared in the policy formation process. General Electric, Westinghouse, and Union Carbide are among their atomic

General Leslie Groves, the man who supervised the building of the Pentagon and was in charge of the Manhattan Project, worked with the du Pont Chemical Trust. Undersecretary of State Dean Acheson served as an attorney for duPont. James Conont, President of MIT and General Electric, was a member of the Interim Committee. John Foster Dulles, after leaving the directorship of Babcock and Wilcox, would serve as Secretary of State, where he would advocate dropping the atomic bomb on China.

Different families would take responsibility for the different parts of the fuel cycle. The Morgans enjoyed uranium mining and fission bombs, while the du Ponts preferred plutonium and fusion bombs.

The AEC worked hard to protect the interests of the corporations:

- The dangers of uranium mining were known for over 100 years. Studies conducted in Europe on the effects of mining were published in the United States. No effort was made to protect the workers.
- The public was repeatedly told that open atmospheric testing of weapons was safe.
- David Lilienthal ordered General Electric not to recognize the United Electrical, Radio & Machine Workers of America.
- Research centers were established in the South where low wages could be taken advantage of, and small towns could be easily vacated. One such town, Ellenton, had to be destroyed for the Savannah River Plant in South Carolina. A sign was erected nearby, "It is hard to understand why our town must be destroyed to make a bomb that will destroy someone else's town that they love as much as we love ours."

The New Science

A new science was established. Vannevar Bush, also of the Interim Committee, called it "a professional partnership between the officers in the services and civilian services" [composed of men who] "have the intellectual fiber and background to enable them to synthesize the two types of thought, military and scientific." The professional militarized scientist would see to it that there was no "hostility between government and business, even if business is big."

To justify the new partnership and arms build-up it was necessary to convince Americans that a threat existed. Charles E. Wilson, Civil Defense Director, and one time President of General Electric candidly stated the issue, "If the people were not convinced that the free world is in mortal danger, it would be impossible for Congress" to vote vast sums of money to 'avert danger'.'

So we were provided with the "bomber-gap," the "missile-gap," the "megaton nage-gap," and the "securitygap." Wilson articulated clearly the era of control. "We are no longer just a manufacturer and seller of electrical equipment. We are a factor in science, in education, in government, and in social progress. We have it within our power to influence the course and character of all private enterprise."

-Mark Evanoff



The day after the atomic bombing of Nagasaki. Improvised acquaintances. These people are exposed to residual or second sickness. This photo was taken 700 meters south of the blas photo by YAMAHATA, from "Hiroshima-Nagasaki: A Pictorial Reco

Aushroom Cloud

Bomb in the Mind

The image of the bomb is a blind spot in our work. Investigating the process that generated it may help us to understand and control it.

Nuclear weapons are a means of imposing threat and inducing fear.

The bomb operates at the political level as a military device for use in conflict the both operates at the pointical tevel as a mintary device for use in conflict between those who control state power in the U.S. and the U.S.S.R and be-tween them and the leadership of Third World countries, both nuclear and non-nuclear. This international projection of threat between ruling classes has impacts on other levels as well. But the primary function of the bomb is to cajole, coerce, or castrate an enemy - as occurred in Japan, in the Cuban crisis, and in the Korean and Vietnam wars.

The bomb exists to threaten any socialist people that tries to disengage from this system. At this level, the bomb embodies the structures of imperial-ism which give rise to the conflicts in which the threats are made. As the symbolic military expression of domination, the bomb and its images cannot

be understood separately from their genesis in and relation to this system.

The bomb also has an impact on the populations of non-nuclear industrial nations. At the economic level, it means taxes, work, and profits for some. At the ecological level, it requires valuable land for bases, resources such as oil and titanium, and threatens the very bases of human existence—the gene pool and the ozone layer of the atmosphere. But it is at the ideological level that the bomb has its most pervasive fallout.

The Bomb's Media Image

Most people learnt of the bomb and its devastating power in the media. Two aspects of the image are notable. The first is its gigantic size: "The great radioactive tower which burgeoned from the explosion appeared as a pillar of orange and yellow flames, smoke and steam. . . The pillar reached a hieght of 60,000 ft. before it began to disperse." (London Illustrated News, 7-13-46.)

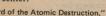
The second aspect of the media image is the terrifying nature of the weapons: "This remarkable sequence of the pictures. . . shows the H-blast starting. . . Notice the first flash turning the area into a deep-night darkness and then the appearance of the fireball growing, growing until it reaches its maximum discussions because the second of the seco dimensions, measuring three and one quarter miles in diameter. In photo 7 it takes the eerie appearance of another world of glowing fantasy. The man-made cloud mushrooms higher and higher through strata of clouds that make ghostly death's head shadows upon it – an allegory of death." (International News Photo telex caption, April 12, 1954.)

Thereby the bomb becomes a ? mark and an ! mark on our mental horizon. It attenuates the future and obliterates historical time. For example, one outcome of a card game called "Nuclear War" is a 100 Megaton bomb hitting a nuclear stockpile which starts a "super chain reaction [which] destroys all countries, the earth itself, and the entire solar system." What does it do to children to play such games?
The "Nature" Metaphor

To complete the description of the popular image -- and to expose its political nature -- we have only to note that it is represented to be a natural growth, a mushroom, about which we can do nothing. As the Melbourne newspaper *The Age* editorialized on April 3, 1954, the day after the U.S. exploded the first H-bomb, "Nature does not put up her shutters at dusk. All through the night the earth revolves; the stars pursue their endless paths; tides ebb and flow; winds rise and fall; seeds germinate; corn ripens; flowers unfold; all living things develop. The music of the spheres becomes a kind of moonlight sonata and the mushroom plays its part in the melody... Some of the biggest and best things in the world sprang up like mushrooms, America and Australia for example. .



elief parties walk through the city, looking for victims and dary radiation, causing a variety of symptoms of radiation





In reality the mushroom itself is not the creation of a single night. It has its roots in prehistoric rainstorms, in fallen forests and in ancient climactic experiences too subtle to trace. . . A mushroom is a thing of hoary antiquity. He who would trace the birth of the veriest triviality will find himself threading the maze of the infinities; the child just born played his part in the Garden of Eden; the latest tick of the clock is an in-

tegral fragment of the drama of the eternities."

The editorial's title is "Trophy of the Night"-a trophy won by Americans from nature. The Americans, one concludes, possess supernatural powers, and are to be feared and obeyed. Those who neglect this duty have the horror of Hiroshima to remind them of the consequences of getting in the way of supermen.

The Bomb in our Dreams

I remember waking one morning in Perth to thunder at dawn, dreaming that the nuclear war had begun. (Perth is close to a Russian nuclear target, the U.S. North-West Cape Communications Base.) For thrity long minutes I lay suspended between sleep and consciousness, paralyzed by fear and wondering, what next? Such is the potency of the image that it can enter our subconscious and emerge to haunt us in

The natural metaphor is the trick whereby we are coerced into compliance with the bomb. While dread of a nuclear war is a valid and healthy state, to fall for the natural metaphor is a convenient error cultivated by those who wield the bomb and generate its image. Instead of fearing the people who control the bomb, we fear and react to the bomb itself. This displacement lays us open to falling for cosmetic and illusory arms control overtures.

Grasping the Toenail of Imperialism

The distinction is crucial. One direction we can go is to support the establishment line which attempts to regulate the spread of the bomb with more safe-guards and neglects vertical stockpiling of weapons altogether. This strategy is bound to fail for political and technical reasons, as is argued even by impeccable conservatives. Non-proliferation strategies maintain and extend precisely the international inequalities of status which result in the spread of nuclear weapons, while leaving the superpower arsenals untouched.
The strategy complements superpower monopoly on nuclear weapons and buttresses the political structures of imperialism.

The other direction we can go is a revolutionary one: the best way to tackle the bomb is not head on, but to dismantle the social structures which reproduce Tactically, this may involve head-on confrontation with nuclear weapons facilities, but this is more useful to demystify the image and to expose the political functions of the bomb than to actually dismantle it. Further, it may be tactically correct at times to sup-port superpower non-proliferation initiatives if this sets two factions of the international ruling class at

each other's throats.

The place to start is not with the bomb, but with anywhere you can get a grasp on a toenail of imperialism. That entails understanding the image of the bomb, replacing it with an understanding of its political functions, and replacing the system that

-- Peter Haves

A Note on the End of the World

In giving this talk, I am violating a strong social taboo. I don't want to stand here before all of you and say the unspeakable, and rub your noses in the ultimate

We live with the knowledge that annihilation, of civilization, perhaps of our species, and perhaps of life itself on this small planet, is likely. It could take place quickly and catastrophically, by a nuclear war, or it could take place more slowly and gradually, by poisoning or depletion of the environment...

depletion of the environment...

For each one of us, the psychological implication of living in the nuclear age is profound. People have always had to face what Kurt Vonnegut calls "plain old death", individual death, and that is hard enough. People have comforted themselves by feeling connected to the past, via their ancestors and their knowledge of history, and connected to the future, via their descendants and their connected to the future, via their descendants and their secondary. connected to the future, via their descendants and their sense of contributing some good work or influence. Our vulnerability to annihilation is new and divides us from previous history; our sense of symbolic immortality and connectedness to the future is jeopardized. We can't even take comfort by identifying with humanity as a whole or with nature and the life-principle, because all of humanity, and all of the biosphere is now susceptible to extinction from human activities.

We are all psychologically tainted with the spectre of

extinction from human activities.

We are all psychologically tainted with the spectre of Armageddon. It profoundly affects our life-choices, in ways we only dimly understand. It robs our actions of meaning. A mushroom cloud of anxiety permeates our

We must stop numbing ourselves, and quickly. We must realize that it's crazy and antisocial not to think about nuclear holocaust, and it's sane and responsible to about nuclear notocaust, and it's sane and responsible to think and speak about these matters. We must realize that we render ourselves powerless by refusing to imagine extinction and thereby making ourselves incapable of imagining what to do to avoid it. We must realize that as

imagining what to do to avoid it. We must realize that as individuals we are powerless but that collectively we have the power. And we must realize that as Americans, we have the special ability and responsibility to prevent life on earth from being snuffed out.

We must begin to break the social taboo against discussing Armageddon. The taboo prevents us from validating each other's perceptions, from comforting each other, and from joining together for change. Only by looking at reality, painful and overwhelming though it is, can we free ourselves to grapple with it and preserve the future; only by looking at reality collectively can we pool our forces to fight the forces of death.

—Carol S. Wolman, M.D.



LETTERS



SEABROOK TACTICS

Reading the debate in the September It's About Times on tactics planned for Seabrook, I felt again the pressing importance for the anti-nuke movement to review the violence/non-violence issue.

The question seems to me to be, who is being violent? The development of nuclear power is quite literally killing us. So is air, water and food pollution, not to mention the filthy and dangerous conditions many of us work under daily. And how about the psychological deadening inflicted by the slop served to us as culture and entertainment (like 'disco)? I feel compelled to ask the advocates of non-violence if we are supposed to keep turning the other cheek until we roll over and croak?

Non-violence as a principle is all too often approached idealistically, shrouded in a mystical moralism which leaves no room for debate, and considered outside the social context in which we are struggling.

If the fight against nukes has shown us anything it should be that the "captains of industry" and the cops have distinctly different interests than we do. When confronted by the armed opposition, advocates of non-violence advise us to appeal to them in terms of our common humanity. But in our present social arrangement, i.e., a class society, all people are not our friends. Hitler and Stalin were people. Somoza and James Schlesinger are people, too. Curtis Lemay retained his membership card in the human race while advocating bombing North Vietnam back to the Stone Age. They are not of our ilk.

But I am not advocating violence as a principle in tactics any more than I am advocating non-violence. Perhaps the best way to explain my view of the situation is to cite a story Daniel Ellsberg told in a talk at La Pena last March [transcribed elsewhere in this issue]. In late 1969, Nixon had secretly threatened to use nuclear weapons against North Vietnam. But the rising tide of opposition to the war forced him to reconsider. The fear that there would be "blood in the streets" and that the national guard would have to be called out in many states caused the "nuclear option" to be indefinitely postponed. Oftentimes the threat of being prepared to use violence can force the "authorities" to back down from a much greater use of violence. But it can only work if we are taken seriously, if they know this is no empty threat.

The people at Seabrook will be upping the ante in the struggle against nukes. Those who go should realize this and all of its possible consequences. New tactical territory will be explored and perhaps new ground broken. There will be room for imaginative play and collective creations if the occupiers do stay a while. If you can be there-go. If not, watch closely. We might all learn something!

> - Steve Stallone Union of Concerned Commies

REVOLUTION WEEK

October 23-29 is Revolution Week! The Bureaucrat Alliance has scheduled a week of activities that should, if everything goes according to plans, cause the final downfall of the state and the start of the construction of the Mellow Society. To take part in Revolution Week activities, though, it is imperative that all participants receive training in Revolution. This training is absolutely essential in order to weed out the provocateurs who would attempt to transcend the limits of acceptable freedom.

For this purpose then, we have scheduled training sessions and workshops to be held throughout September. Some of the workshops will include: Righteousness/Self-Righteousness; How to Conduct Oneself in a Spiritual Manner; The Essence of Mellowness; 60's Anti-War Songs; Looking Toward the Past; How to Conduct Oneself at Meetings; How to Form a Committee; plus lots and lots of theory. Revolution Week activities will begin at noon on Sunday, October 23, with a spontaneous demonstration at UN Plaza. (For more details on this, contact the Spontaneous Demonstration Task Force. If you would like to be a marshall at this demonstration, call the Security Director during business hours.)

On Monday, October 24, at 11:00 A.M. we will have a non-violent sit-in and CD action on East Third Street in front of the Tomkins Square US Post Office Window Service Substation. This is an alternative site, selected after the police informed us that it would not be a good idea to hold it in the middle of Fifth Avenue and Forty-Second Street. The Post Office Window Service Substation is an appropriate symbolic target, because it is part of the government. The Greenwich, Connecticut contingent will be in charge of relating to the people in the neighborhood. The Ninth Precinct has assured us that police protection will be provided.

Since this is to be a confrontation, keep in mind that 1) the policeman is your friend, and 2) if he looks bored and it seems as if he will go inside for a cup of coffee, make eye contact and explain to him, mellowly and politely, why you are there and how you are going to solve all the problems of the world.

EVERY PERSON A BUREAUCRAT! LONG LIVE THE BUREAUCRACY! LONG LIVE THE BUREAUCRAT ALLIANCE!

ABALONE ALLIANCE JAIL PREPARATION

During the past few months a number of male Abalone Alliance members have been beaten, sexually threatened and generally harassed while serving time in San Luis Obispo County jail. They were serving sentences as a result of their participation in the August 1978 action at Diablo Canyon. These men were not the first Abalones to serve their sentences, they were however, the first to be subject to such personal violence.

The Abalone Alliance has done a very good job of preparing its members for participation in civil disobedience. It has not done such a good job in preparing them for dealing with the consequences of civil disobedience including jail. Jail preparation is as important and necessary as action participation. It can made a difference in quality of the participants' experience, and affect the person's relationship with the Abalone Alliance.

Jail preparation, both before arrest and after, can help Abalones understand and face jail as others have actually experienced it, not as we may imagine it. The preparation may not be able to prevent violent incidences, but it can rid us of our illusions that it could not/would not happen to us. The factual knowledge of what does happen and what could happen is one of the best defenses we have.

To meet this need I have designed two jail workshops. The first includes a factual description of life in jail, feeling sharing and the role of support people. I suggest this mini-workshop be incorporated into all non-violence

The second workshop is designed for people who have been sentenced or plan to be soon. Their family or support people are encouraged to attend. The agenda for the three hour workshop includes: feeling sharings, brainstorming troublesome situations, role plays, personal narratives from ex-inmates, and time for participants to form groups to go to jail with

I am willing to come to your area to lead a workshop or teach others to lead them. Denna Hurwitz and I are preparing a jail pamphlet which will include much of this information. We are interested in hearing from people who have been in jail; let your experience help another

-Liz Paul



REACHING CONSENSUS

Our failure to understand and use the consensus process effectively has led to problems, especially in large group situations where it is sometimes crucial that important decisions be made.

In the past, decisions needed quickly have often been left up to Abalone "organizers" or lawyers. This is not ideal or democratic. With the upcoming blockade and hundreds (or thousands) of us headed for jail again, this is a major problem we are going to have to deal with this year.

In our many past attempts to reach consensus we have encountered no problems when there is (1) unanimous agreement on a proposal—meaning no objections OR, (2) when a person/s who blocks consensus initially, later on agree to step aside. A serious problem arises when neither of the above conditions exists; and this is where our process breaks down and fails. In short our problem lies not in our attempts to reach consensus up to a point when things are running smoothly, but in our inability to reach consensus when most of us agree on something and a small minority of us don't.

Many AA members have the misunderstanding that consensus CANT BE REACHED unless there is complete unanimity. Our handbook correctly states that consensus does not necessarily mean complete unanimity. It is important that we all understand this basic concept of consensus.

If people initially block consensus and after a reasonable group effort have been unable to convince more than a small minority to their way of thinking, I feel it is their obligation to step aside. This goes not only for mild objections (when it's fairly easy to step aside); but also for strongly felt objections. This is where I differ with our handbook's view of consensus.

Speaking from a personal basis—If I feel strongly against a proposal; no matter how strong my objection may be I think it's fairer to the group (and to myself) to step aside and not hold up the group any longer. Not to do so is selfish and individualistic and is not in the group's (or my) best interest, I can at this point abide by the decision of the group, while at the same time continuing to talk with people about my ideas, or if I absolutely can't live with the decision I can leave the group, and work with others who agree with me. This may sound harsh to some; but I've learned from my years of collective experience that it usually works out best for all people involved.

As a last resort or in emergency situations we could adopt an 80% rule (it could be 70% or 90%). What this means is that, if needed, we take a hand count (or in large situations an affinity group or an area group countassuming these groups are nearly identical in size so it would be democratic) and call 80% agreement a consensus. This would be in the event that the first solution had not been effective and the small minority still don't care to step aside. This figure could also be used as a standard for seeing how close or how far away we are from reaching a consensus. This rule could also be applied in emergency situations, such as in jail, when we might not have time to struggle with objections through a normal "reasonable group effort."

When our structure permits a small minority of people to continually block consensus for either unprincipled or very principled reasons (it doesn't really matter) we don't have a more democratic decision making process—we have a less democratic decision making process. Instead of having a structure more democratic than majority rule, we come full circle and have a few people controlling the desires of many!! This is certainly not the intent or the end result of a properly understood and utilized consensus

> -Unity Thru Struggle David Queen San Francisco

OUR NEW STATUS?

Now that we in the Abalone Alliance are getting ready to make the shift from symbolic actions to those aimed at making some real transfer of power, talking strategy and tactics seems particularly timely. But the recent beginning of formal meetings between power company execs and Alliance representatives is also an incredibly important new development in our situation. It means that our organization, based as it is on a very new concept of direct action politics, has been given formal recognition by our adversaries.

It seems to me that the only way to change what the power structure is doing is by focusing as much energy as we can directly at its pressure points. Only by maneuvering the struggle to an arena where they are weakest and we are the strongest can we hope to be successful. Their power rests on many supports, the weakest of them being public acceptance and their own mental and emotional determination to continue their policies. So I am suggesting that we concentrate some creative energy on using our new status to dramatically manipulate the psychological climate that they are operating in.

It will make a very big difference in the public eye if the Abalone Alliance gets the image of a formally recognized body negotiating with the power company on behalf of public safety rather than just another group of demonstrators and protestors. Once we have developed this image sufficiently we will be in a position to carefully maneuver them into a media showdown that they can't possibly survive. Naturally they will not want to let this happen—their request for secrecy about the meetings so far shows how much they fear it—but on the other hand they are in a very precarious position because as a public utility with so much responsibility they cannot formally refuse to appear on the media and answer for themselves.

I ask you to seriously consider this line of strategy for

the important times that lie ahead.

-Ernie Tello

Crud at Dresden

The Dresden I nuclear power plant near Morris, Illinois has become so radioactively hot that workers cannot carry out routine maintenance. The plant was shut down a year ago to prepare for a new process called "decontamination" that is supposed to prolong the life of the 19-year-old plant.

During the decontamination, 85,000 gallons of a mystery chemical called NS-1, manufactured by Dow Chemical, will be flushed through the pipes of the reactor. If the experimental cleaning works, authorities hope that over half a ton of radioactive metal oxides known as "crud" will be removed.

However, many questions remain unanswered. What radiation doses will workers who carry out decontamination receive? What effect will the corrosive solvent have on the various joins, welds and valves? Will special treatment be needed for the crud after

This waste will be unique because it will be bonded to components of the NS-1 solvent called chelating agents. These agents complicate the already difficult problem of radioactive waste disposal, since chelated wastes are more likely to migrate from their original burial sites. "It's like putting radioactive waste on roller skates," says Kay Drey of St Louis, who has thoroughy researched the issue. Drey is especially worried that chelates will be added to reactor systems on a routine basis. If this industry plan is carried out, it will greatly expand the scope of the

Decontamination at Dresden is expected to cost nearly \$36 million. Since the buildup of radioactive crud was not foreseen by the nuclear industry, the cost for removal was not included in utility cost calculations. \$8.2 million of the total cost will be provided by the Department of Energy. Half of the remaining expense will be paid by electricity consumers in northern Illinois, and the other half designated as an operating expense. The Illinois Safe Energy Alliance is calling on the Nuclear Regulatory Commission to hold hearings into the experimental cleaning of the reactor.

-- Marilyn Shineflug, Illinois Safe Energy Alliance

Philippine Reactor Whitewash

A three-year fight against the export of a Westinghouse nuke to the Philippines reached a new stage on September 14 when plant opponents walked out of health and safety review hearings in Manila. Philippines Dictator-President Marcos had called the hearings in June, (very) temporarily suspending plant

Any speculation that the Three Mile Island fiasco had caused Marcos to rethink the wisdom (political, economic and environmental) of installing the plant were squelched when the Manila commission abruptly announced the conclusion of the hearings, refusing to hear the testimony of three key opponent

One of these groups was from Bataan Province, where the reactor is being built on three - or possibly four -- active earthquake faults. The Bataan group was joined by scientists and the Philippine Movement for Environmental Protection in the walkout.

The next move belongs to the U.S. State Department, which must give the reactor the go-ahead on security and defense grounds. (The reactor is sited near two U.S. military bases, so a nuclear accident could "threaten our national security.") If the State Department gives a go-ahead, the NRC must issue -- or deny -an export license.

The Campaign for a Nuclear Free Philippines is pressuring the State Department (through Congress) to initiate public review hearings in this country. Plans are in motion for a fourth International Day of Protest targeting the NRC later this fall.

Also this fall, a former construction worker on the Phillipine nuke will be visiting California. Romeo Villaneuva, now an organizer against the plant, would like to speak and present a slide show to interested groups. Contact the Campaign for a Nuclear Free Philippines, 2729 Derby, Berkeley 94705, 415-849-1174.

- Lyuba Zarsky

It's About Times

October 1979

POLITICAL ECOLOGY CLASS

This eight-week class exploring the political implications of the environmental crisis and the environmental movement will begin on Thursday, October 18 at the East Bay Socialist Schoo., 6025 Shattuck Ave., Berkeley. For more information, call Tom Athanasiou at 841-1114.

SHORT CIRCUITS

NATIONAL ENQUIRER TELLS THE TRUTH

The American College of Nuclear Medicine, the fellows who work with radioactive materials in hospitals, were of course concerned about the Three Mile Island accident as well. Of all the various accounts of the accident, the college endorsed in its June newsletter the version reported by the National Enquirer. For those of you who may have missed it, that was the edition whose headlines screamed from supermarket stands that TMI was "A

The Enquirer, it was pointed out, had the guts to inform America that there was nothing to worry about, that no one should have been evacuated, that there was and will be no radiation damage and that the media created most of the concern. The ACNM listed seven scoops from the Enquirer supporting the hoax theory, then concluded: "There are many more. But why go on? The Enquirer said it correctly!"

-Critical Mass Journal

SPANISH PROTESTOR KILLED

On June 3, International Anti-Nuclear Day, thousands of demonstrators in Spain participated in rallies sponsored by municipal governments and environmental, citizens and cultural groups as well as by the political parties.

In the Basque city of Tudela, the Civil Guard appeared at a peaceful, legal meeting and dissolved it. When a group of six young people remained seated, a number of Civil Guardsmen cane toward them, firing their weapons. Everyone fled except Gladis del Estal a Civil Guard approached and after kicking her, fired a shot at her. Still not content, they prevented her from receiving medical attention. Gladis bled to death

The response was swift. On the following Monday, a general strike that lasted until the late hours of the next morning was held in the town of Navarra. In Pamplona, barricades were built. Other general strikes throughout the Basque country demanded the resignation of the Civil Governor, punishment of the Civil Guardsmen, the closing of the Lemoniz nuclear plant, and the removal of American military bases from the Basque country.

-- Newsfront International, August 1979

NUCLEAR WASTES: NO ROAD TO TRAVEL

Port cities in North Carolina have been bowing to public pressure and have passed laws against moving nuclear materials through their territory. These ports are among the last within easy reach of the federal processing center near Aiken, South Carolina, and were among the few open to foreign nuclear shipments.

The used fuel elements in question come from reactors sent abroad by the Atoms for Peace program. The U.S. government had accepted the obligation when these reactors were exported to accept and store their waste. Such shipments now come through Portsmouth, Va., and are trucked to South Carolina.

But the NRC recently required high level waste shipments be routed around cities of populations greater than 300,000, and has been hampered in finding alternative shipping points by local movements that have won laws barring nuclear shipments.

—Guardian

THREE MILE ISLAND WASTES

Much more radioactive waste than expected is being shipped across the continent from the Three Mile Island nuke to the state of Washington for disposal. According to earlier reports, somewhere in the "neighborhood" of 200 shipments would be required to transfer the low-level radioactive wastes to the Hanford nuclear dump near Richland, Washington. But a new report released by the Bechtel Corporation indicated that more than 2700 shipments will be trucked from Pennsylvania to Hanford for burial.

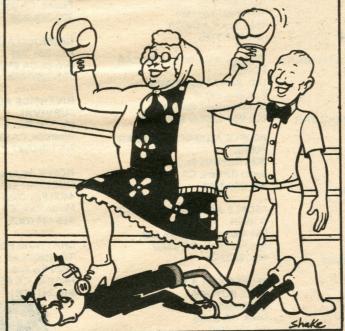
-- Zodiac News Service

REDDY KILOWATT LEGALLY A PARODY

The battle over Reddy Kilowatt, that cute little devil power companies have used in promotion literature, has concluded. And the Good Guys won.

Environmental Action Foundation, which began using Reddy to poke fun at the utilities, was sued over two years ago by Reddy Communication, Inc., owner of the Reddy Kilowatt concept. The company charged that EAF was infringing on its trademark, while EAF countered that it was merely exercising its first Amendment rights in drawing parodies of Reddy. The case went to U.S. District Court, where Judge Howard Corcoran ruled in favor of EAF.

Reddy Kilowatt goes down, stays put.....



Environmental Action Foundation's victory cartoon 'Reddy' will continue to confound utilities

ENERGY COMMISSION FORECASTS

The California Energy Commission predicted at the end of August that California will need only enough new power plants to meet an energy growth rate of 2 percent a year through the year 2000. This forecast is below the 3.8% rate announced by the commission in 1977 and the 3.4% still predicted by the state's utilities. The Energy Commission staff said there would "undoubtedly" be a need for some new power plants, but it did not say where they. should be constructed or what fuels they should burn.

A PG&E spokesperson called the 2 percent figure "overly conservative." "If the staff's estimate is adopted as state policy," he said, "it should ostensibly lead to power shortages in California."

- SF Chronicle, August 29, 1979

THE MANHATTAN PROJECT

Sixteen members of a group called "The Manhattan Project" were arrested on August 31 inside the Board of Directors meeting room of the First National Bank of Boston. The protestors said their sit-in was designed to force a face-to-face meeting with the bank's directors who have authorized a \$115 million line of credit for the building of the Seabrook nuclear plant in New Hampshire. Instead of the face-to-face meeting, however, the 16 were arrested and charged with criminal trespassing. They were later released on on \$500 personal recognizance bonds.

-- Zodiac News Service

Could Diablo Run on Gas?

Rallies, blockades, and community organizing might not be enough to stop Diablo Canyon. If, we want to win, we ought to take seriously the possibility of conversion.

At least four smaller nuclear plants in the U.S., Sweden, and West Germany have already been converted to alternative fuel sources.

Recently, however, the California Public Utilities Commission did a "cursory" study of converting Diablo; their tentative conclusion was that it would be cheaper to tear the whole thing down and start over. But a paper by Jim Harding of the Friends of the Earth and Meir Carasso of the Bechtel Corporation concluded that converting big nuclear power plants was practical, with 50-80% of the capital investment unaffected by conversion. Harding estimates that it would cost \$500 to \$800 million to convert Diablo to fossil fuel, less than half of what PG&E has already invested. Natural gas (which will be plentiful in California for some time to come), appears to be the most practical fuel source for the converted plant.

If the conversion takes place, workers (particularly reactor operators) will have to be retrained. If Diablo is not converted or operated, it will be imperative to convert the jobs and skills of all the workers, either to non-nuclear power plants within PG&E, or to alternative energy work outside PG&E. Although the International Brotherhood of Electrical Workers (IBEW), which represents PG&E workers, is presently committed to a nuclear Diablo, it is conceivable that rank and file members might push their union to get involved in conversion planning to protect their jobs.

What could safe energy activists start doing to make conversion of Diablo a reality? A first step might be for the Abalone Alliance to mount a campaign to pressure Governor Brown to have the State Energy Commission conduct a thorough study of converting the Diablo plant and its workers' jobs. Safe Energy groups in the San Luis Obispo area might consider a campaign to get the county supervisors to set up a task force to plan the conversion of Diablo Canyon. If the supervisors refused, a county initiative could be put on the ballot.

If you would like to help work on conversion, contact Stewart Burns, (415) 494-0363, or Gary Farber, (415) 845-

-Stewart Burns

Peaceful Uses for Lockheed

Sometime in October, the first Trident missile will be sent from the Lockheed Missiles and Space Company's Sunnyvale plant to be deployed on a Poseidon submarine. The Stop Trident/Convert Lockheed Coalition will join more than a dozen communities across the country in actions October 26, 28 and 29 calling for "nothing less than the complete halt of Trident and all similar weapons, and the redirection of national priorities."

A vigil for nuclear disarmament will be held at the Soviet Consulate in San Francisco on Friday, October 26. On Sunday the 28th, there will be a march and vigil at Lockheed's Trident missile plant in Sunnyvale, followed by workshops at a site nearby. Civil disobedience at Lockheed is scheduled for Monday, October 29.

Opposition to Trident is growing. In May 1978, 300 people were arrested for crossing the fence onto the Bangor naval base in Puget Sound where the Trident will be homeported. This spring 4,000 people rallied, and several hundred were arrested in civil disobedience at the first Trident sub's dedication in Connecticut.

It is imperative that such actions continue and grow. In face of the abstract and distant SALT II debate, a grassroots constituency against Trident and in favor of disarmament and peace conversion is needed. Such efforts add substance to steps for disarmament and may make support of nuclear weapons politically unviable.

Persons or affinity groups who wish to participate in the October 26-29 actions may contact the following: San Francisco, 751-4656 or 641-0489; East Bay, 841-7121 or 849-2360; Peninsula, 494-0363 or 526-1977; San Jose, 998-0393 or 294-5642; Santa Cruz, 425-1275 or 423-1626; Abalone Alliance office, 543-3910; Alliance for Survival in LA, (213) 937-0240 or your local Abalone Alliance chapter!

Persons who have participated in Abalone Alliance trainings are eligible to join in the civil disobedience with an affinity group.

For information about future trainings, and other details about the October 26-29 actions, contact Stop Trident/Convert Lockheed, P.O. Box 2324, Santa Cruz, CA 95063, (408) 425-1275.

Nuke-o-Ware?

The giant Bechtel Corporation, a major contractor for nuclear plants, has cooked up a new public relations program called NEED, National Energy Education Day. What Bechtel has in mind is not some noisy public relations campaign, but a sneaky, quiet little affair in which local people are invited to a coffee klatch where, in the comfort of your neighbor's living room, you'll be spoon-fed pro-nuclear propaganda from your local Bechtel employee.

It's sort of a Tupperware Party for nuclear power. Sound like fun? Well, Bechtel employees better think it's fun because the company P.R. department is doing a bit of arm-twisting to get workers to join in the "coffees," as the affairs are called.

The company memo we've obtained argues that, "It is time to step back from the emotionalism and misinformation generated in the wake of Three Mile Island and look closely at the nuclear option."

But lest you think that this NEED program is some self-interested ploy by Bechtel in a desperate attempt to shore up its plummeting nuclear division, note this: NEED is co-sponsored by the friendly folks from the Atomic Industrial Forum, the Edison Electric Institute ("Watson, come quickly! We've got a meltdown!") and even something called Nuclear Energy Women, which, we suppose, is a brigade of irradiated nuclear workers like Karen Silkwood.

"Coffee hosts," the internal memo adds, "will be sent a 'how-to' kit which will include complete instructions and a timetable for organizing the coffee, invitations to address and mail, and a set of handout materials on nuclear energy for their guests." The kit does not include instructions on building atomic or thermonuclear weapons, however.

If you'd like to hold a nuclear coffee hour in your home, just call Carroll Wright at the San Francisco Bechtel office, 768-1234, ext. 8207, and say you want to hold a NEED coffee. Tell them Reddy Kilowatt sent you. Then invite your friends and neighbors and get down with Bechtel.

-Mark Powelson, reprinted from the Berkeley Barb

Secrecy or Security

unless their possessor also has the necessary nuclear materials. But possession of these materials via theft or a "peaceful" reactor is quite enough to make a bomb, secret or no secret. Every nation that has tried to make a bomb has succeeded on the first try -- with no help from the U.S.

The obvious solution is not to suppress ideas, but to shut down the multinational industry that produces these uniquely dangerous materials. No

(continued from p. 4)

materials, no bombs. But the industry and government would rather sell us the illusion of "security through secrecy" instead.

Albert Einstein was among the first to realize that secrecy was no security in the atomic age. In 1947, he wrote:

"Through the release of atomic energy, our generation has brought into the world the most revolutionary force since prehistoric man's discovery of

fire. This basic power of the universe cannot be fitted into the outmoded concept of narrow nationalism. For there is no secret and no defense; there is no possibility of control except through the aroused understanding and insistence of the people of the world.

"We scientists recognize our inescapable responsibility to carry to our fellow citizens an understanding of the simple facts of atomic energy and its implications for society. In this lies our only security and our only hope -- we believe that an informed citizenry will act for life and not death."

-- Bob Van Scoy

Safe Energy Groups

ABALONE ALLIANCE OF MARIN 8 N. San Pedro Rd. San Rafael, CA 94901 415-472-4007 or 472-4047

ALLIANCE AGAINST NUCLEAR POWER c/o Carroll Child

University of California Medical Center N3I9-X San Francisco, CA 94I43 4I5-68I-I028 (h) or 666-I435 (UC)

ABALONE ALLIANCE OF MARIN 8 N. San Pedro Rd. San Rafael, CA 94901 415-472-4007 or 472-4047

ALLIANCE FOR SURVIVAL 712 S. Grand View St. Los Angeles, CA 90057 213-738-1041

AMERICAN FRIENDS SERVICE COMMITTEE 2160 Lake St. San Francisco, CA 94121 415-752-7766

BOLINAS AGAINST NUCLEAR DESTRUCTION c/o Greta Goldeman Box 36I Bolinas, CA 94924 4I5-868-II20

CHICO PEOPLE FOR A NUCLEAR FREE FUTURE 708 Cherry St. Chico, CA 95926 916-345-8070

NAPA VALLEY ENERGY ALLIANCE P.O. Box 97 Napa, CA 94558 707-255-7493 CITIZENS FOR ALTERNATIVES TO NUCLEAR ENERGY 424 Lytton Palo Alto, CA 9430I 415-325-6049

COMMUNITY NETWORK FOR APPROPRIATE TECHNOLOGY 709 Davis St. Santa Rosa, CA 95401 707-528-6543

COASTSIDERS FOR A NUCLEAR FREE FUTURE P.O. Box 1401 El Granada, CA 94018 4l5-728-7406

COMMUNITY ENERGY ACTION NETWORK P.O. Box 33686 San Diego, CA 92103 714-236-1684 or 295-2084

EAST BAY ANTI-NUCLEAR GROUP 585 Alcatraz, Suite A Oakland, CA 94609 415-655-1715

GROUP OPPOSED TO NUCLEAR ENERGY 300 South 10th St. San Jose, CA 95II2 408-297-2299

LOMPOC SAFE ENERGY COALITION 238 South J St. Lompoc, CA 93436 805-736-1897

MID-PENINSULA CITIZENS FOR SAFE ENERGY 75 Lodato Ave. San Mateo, CA 94403 415-574-3245 ABALONE ALLIANCE OFFICE: 944 Market St., Rm. 307, San Francisco, CA 94102 415-543-3910

DIABLO PROJECT OFFICE: 452 Higuera St., San Luis Obispo, CA 9340I, 805-543-66I4

MOUNTAIN PEOPLE FOR NUCLEAR FREE LIFE 260 Desear Way Felton, CA 95018

NEVADA COUNTY PEOPLE FOR A NUCLEAR FREE FUTURE 242 Commercial St. Nevada City, CA 95977 916-272-4848

PELICAN ALLIANCE P.O. Box 596 Pt. Reyes, CA 94937 415-663-8483

PEOPLE'S ANTI-NUCLEAR COLLECTIVE U.C. Berkeley 607 Eshelman Hall Berkeley, CA 94720 415-642-7783

PEOPLE AGAINST NUCLEAR POWER, U.C. SANTA BARBARA P.O. Box I4006 Santa Barbara, CA 93107 805-968-4238 or 968-2886

PEOPLE AGAINST NUCLEAR POWER 312-I East Sola St. Santa Barbara, CA 93010 805-966-4565

PEOPLE AGAINST NUCLEAR POWER 944 Market St., Room 808 San Francisco, CA 94I02 4I5-78I-5342

PEOPLE FOR A NUCLEAR FREE FUTURE 433 Russell Davis, CA 95616 916-758-6810 PEOPLE FOR A NUCLEAR FREE FUTURE 515 Broadway Santa Cruz, CA 95060 408-425-1275

PEOPLE FOR A NUCLEAR FREE FUTURE P.O. Box 160233 Sacramento, CA 95816 916-446-1629 (Eves)

PEOPLE GENERATING ENERGY 452 Higuera Street San Luis Obispo, CA 93401

PEOPLE FOR SAFE ENERGY c/o 2069 E. Harvey Fresno, CA 9370I 209-268-3I09

REDWOOD ALLIANCE P.O. Box 293 Arcata, CA 9552I 707-822-7884

RIVERSIDE ALLIANCE FOR SURVIVAL c/o 3150 Redwood Dr. Riverside, CA 9250I 714-748-0047

ROSES AGAINST A NUCLEAR ENVIRONMENT 4400 Fair Oaks Ave. Menlo Park, CA 94025 415-494-0355

SHASTANS FOR ALTERNATIVES TO NUCLEAR ENERGY 1620 Fig Ave. Redding, CA 96001 916-241-7081 SONOMA ALTERNATIVES FOR ENERGY P.O. Box 452 Sonoma, CA 95476 707-996-8690

SO NO More Atomics 62l Humboldt St. Santa Rosa, CA 95402 707-526-7220 or 526-722l

STANISLAUS SAFE ENERGY COMMITTEE
P.O. Box 134
Modesto, CA 93354
209-529-5750

STOP URANIUM NOW P.O. Box 772 Ojai, CA 93023 805-646-3832

S.U.N.N.Y. 580 Lighthouse Ave. Monterey, CA 93940 408-375-7794

TEHAMANS AGAINST NUCLEAR POWER 905 Jackson No. 2 Red Bluff, CA 96080 916-527-8054

VENTURA SAFE ENERGY P.O. Box 1966 Ventura, CA 93001 805-643-2317

A.A. Changes

I've been feeling very discouraged about the Abalone lately, especially after talking with people who were at the Santa Barbara conference. The question "Will there be an Abalone Alliance in three months?" no longer seems

I've had a recurring dream in which there are endless variations of being in an immense hall, usually a gymnasium, lit by flouorescent lights and filled with hundreds of sweaty people packed together listening to proposal after proposal at an Abalone conference. The dream goes on for hours and when I wake up I feel exhausted. The dream it seems to me, is dangerously close to reality. We are all stifled by a bureaucratic structure that no one wants, and yet we don't want to give up a statewide organization that at one point was healthy and energizing. Perhaps others feel as I sometimes do, a sense of responsibility. What went wrong, we ask.

The answer of course, is that we've outgrown this skin. The method of decision-making that was appropriate two years ago when there was a core group of about 60 activists around the state is unwieldy and bumbling when there are 600. We need to take two positive steps forward to get out of our present doldrums: a) begin to work together in regional units which are small enough to get to know each other and use the consensus process well, b) develop short and intermediate term action strategies on local and regional levels while continuing to mobilize for Trident and Diablo.

Action/Eduction. As we form neighborhood groups and do more intensive outreach there is a strong need for basic education. The teach-ins this fall will be an important step in that direction; small fairs, film festivals, workshops and the like are equally important. But education itself is not enough. Once people realize the horrors of the nuclear industry it is unfair not to help them find a vehicle for changing the situation. We need to form creative direct action campaigns in our communities that address our local problems. Our regional actions may be smaller than we are used to from working on a statewide level, but if they are energizing and involve the local community, that is a good start. Moreover, these actions will actually pull existing affinity groups and regions closer together and help to mobilize more people for Trident, Diablo and any other statewide actions that emerge. Activity keeps regions hopping and ready to come to the support of other regions when there is a call for participation.

We need to encourage experienced Abalones to get involved on a local level. In some ways this is asking a lot: it's not as glamorous or exciting to go door to door canvassing or to have a neighborhood energy fair as it is to plan a mass rally. But it is crucial for those who have skills to pass them along, and to work patiently with those who are new to the movement. We are really being revolutionary when we teach ourselves and others how to take control over our own lives and environment.

Sustained Yield. This is a phrase used in forestry which keeps coming to mind. More than ever before, we need to build that concept into the movement, learning to work together in effective ways that don't cause burn-out. Centralization places a large burden on a small core of activists because they have the latest information and more experience. Decentralization should provide the personal support of small groups, the training sessions will help to spread the skills around, and the balance of action and education should attract people and build a braoder core of experienced activists.

Finally, we need to develop an openness and tolerance for each other. Abalone has been overwhelmingly successful in mobilizing a statewide community which shares essentially the same values and goals. There are differences, and there will be more as we grow to include more people. Diversity is healthy and as long as we are moving together in the same general direction, we can accept slight variations on a theme. Criticism is also good, if it is within a loving context.

If we can accomplish these changes and build a working nuturing support network we will be pushing forward the edge of our movement and the innovations in our current structure. We will be taking control of our environment and our lives from the inside out. As the song says.. "and the energy will flow and flow, the energy will flow."

NEXT ISSUE'S DEADLINE - Nov. 10

Rancho Seco Task Force

The first meeting of the N. California Rancho Seco Task Force was held September 9 in Marin County. Four action/study groups were formed focusing on Sacramento Municipal Utility District (SMUD) elections, alternative energy planning, civil disobedience and education, and communications.

SMUD Elections

Two elections are scheduled next year in SMUD. The first is an alternative energy initiative, which will be voted on in June 1980 if the required 15,000 signatures are gathered. The second election will be in November 1980 for SMUD board seats. At present two of the five directors are anti-nuclear, and the focus in November will be to retain the two anti-nuke people and unseat one of the pro-nuke three. Contact Pat MacDonald (916) 455-4259 and/or Nancy Ostiguy (916) 447-2462, Californians for Safe Energy, 1617A 16th Street., Sacramento.

Alternative Energy Planning

We will be working on a booklet that will provide answers to many of the questions about alternative energy sources. Interest was expressed in an alternative energy convention for sometime in 1980 before the general elections. Contact Mike Sweeney at SO NO More Atomics (707) 526-7220.

Civil Disobedience and Education

Possible actions at the November NRC hearings focusing on alternative energy were discussed. The emphasis was on education along with any CD action. Representatives from all affinity groups are invited to attend the next meeting. Contact Dorothy Hughes (W) (415) 456-7693 or (H) 383-2808.

Communication

Good communication within the Rancho Seco Task Force is essential for a successful action. Phone trees need to be improved. Public outreach can be strengthened through local leafleting, and making use of free T.V. time.

Michelle Wade of AA Marin volunteered to serve as contact person for all the small groups. (415) 472-4007.

-Joseph Engelman

Contra Costans Stake Out NRC

The Western Regional Offices of the Nuclear Regulatory Commission are located in the relatively obscure suburban city of Walnut Creek. But on August 20, Contra Costans Against Nuclear Power began a four day around-the-clock vigil outside the Commission's doors. The citizens' vigil was planned to draw public attention to the imminent liftings of the NRC moratorium on plant licensing and to the controversies surrounding Diablo Canyon.

As supporters from around the Bay joined in, the NRC staff was abuzz with rumors of civil disobedience or a sitin. Perhaps out of exasperation or curiosity, the NRC director Bill Engelken agreed to a meeting. For an hour, four group representatives and a local reporter sat down with Mr. Engelken and an NRC PR man to discuss the issues. The ocean that separates us became apparent.

We were able to get a straight story on at least one aspect of Diablo. The NRC officials are fully convinced that Diablo Canyon is earthquake safe, that there is no legal reason to deny the license, and that the plant will probably be licensed before 1980.

Over the four days, hundreds of leaflets were distributed and the vigil was covered in local newspapers and on television and radio. On the last day, a release of balloons drifted over the homebound commuter traffic.

A few days later, the NRC attempted to lift their moratorium on plant licensing. Perhaps the vigil, like the many other actions designed to inform the public, was responsible for some of the outcry that forced the Commission to back down and reinstate the ban.

-Sandy Stevens, Contra Costans Against Nuclear Power

This issue was produced by Connie Clark, Marcy Darnovsky, Mark Evanoff, Joanne Evind, William Meyers, Tom Price, Steve Stallone, Bob Van Scoy, and Bo Zwadsky.

Special thanks to Cindy Cornell and Mark Ryan for typesetting, and to Roberta for our new logo.

October Calendar

Sept.

28-30 Florencia (loving) Survival Gathering, in New Mexico. United effort by Chicano, Indian, Anglo, and other people to spiritually and physically demonstrate opposition to the dumping of radioactive waste in the nation's first permanent waste dump, known as the Waste Isolation Pilot Plant (WIPP). Native American lands are used for uranium mining to begin the nuclear fuel cycle, and now they will be used for the end of the cycle.

Oct.

- Planning meeting for conversion of Diablo. 7:30 P.M., 2228 California St., Berkeley. Contact: Steart Burns
- Slide show and presentation with Romeo Villanueva, a nuclear reactor construction worker in the Philippines' first atomic plant. Music and a film are included. 8:00 P.M., La Pena, Berkeley.
- Coalition to Stop San Onofre Rally. The purpose of the rally is to mobilize opposition to the licensing of San Onofre Units 2 & 3, and to commemorate the death of Karen Silkwood. Licensing hearings on the units are expected to begin in November. A canvassing drive will also be kicked off.

- The Nuclear Dilemma will be the first film in a series presented by Citizens for Safe Energy of San Mateo County. Congregational Church of San Mateo, 8:00 p.m. For info: 342-5676.
- Non-Violence Training. There will be non-violence trainings in San Francisco every second Saturday of the month (November 10, December 8). Additional trainings will be scheduled as they're needed. For locations and further info call S.F. Trainers (431-1855) or PANP (781-5342).
- Benefit for the Pelican Alliance, featuring Jesse 14 Colin Young and Honey Creek, 3:00 P.M. at the Red Barn, Point Reyes Station. For more information call (415) 66308483 or 669-1468.
- SAFE ENERGY FAIR, alternative energy exhibits, homemade goodies, music and information on nuclear issues. Precita park, S.F. (Folsom near Army). Come for the afternoon. Sponsored by the Bernal Heights and Mission neighborhood groups. For more info, call Jon or Liz at 285-2433.
- Paul Jacobs and the Nuclear Gang, second in the film series being sponsored by Citizens for Safe Energy of San Mateo County, will be shown at 8:00 at College of San Mateo, 1700 W. Hillsdale Blvd., San Mateo.
- Solar Promises, third and final film in a series presented by Citizens for Safe Energy of San Mateo County. Film will be shown at 8:00 p.m. at the Congregational Church of San Mateo. For more details, call 574-3245.

STOP TRIDENT/CONVERT LOCKHEED ACTIONS:

- Vigil at Soviet Consulate, San Francisco. Contact: Fred Stevens (415) 845-1992.
- 28 March, Vigil and workshops in Sunnyvale. March and vigil at 1 p.m., workshops at 4 p.m. Contact: (408) 998-0393.
- Civil Disobedience at Lockheed Missiles and Space Co., Sunnyvale. Training with Abalone Alliance or October 27. Contact: (408) 425-



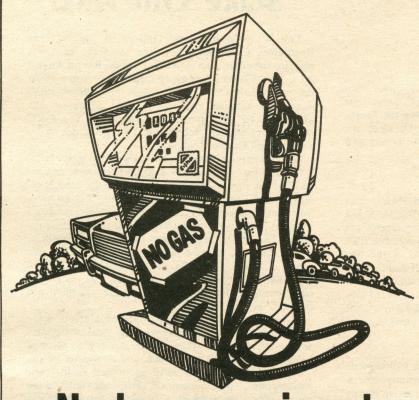
I'll support Abalone Alliance communication. Here's \$5.00.

I can afford more. Here's my donation of ___

zip

[] Check here if this copy of IAT was mailed to you. Make checks payable to It's About Times. Send to: Abalone Alliance, 944 Market St., Rm. 307, San Francisco 94102.

CORPORATE LIES DEPT.



Nuclear power is part of the answer.

As President Carter said on July 16:
"Nuclear power must play an important role in the U.S. to insure our energy future."

The severity of the energy crisis is real.

The long lines at the gasoline pumps this summer were only the beginning if we do not move now to reduce our nation's dependence on foreign oil.

Consider these facts about nuclear energy:

FACT: In 1978 alone, 72 nuclear plant in the U.S. produced energy equivalent to 1.3 million barrels of oil a day. That also is the energy equivalent of enough gasoline to fuel 17 million cars—for a full year.

FACT: Those 72 plants generated 139 of America's electricity. But Chicago

depends on nuclear energy for over 50% of its electricity—the New England states 33%.

FACT: Another 126 nuclear plants are under construction or on order. When completed, in addition to those now operating, nuclear can provide the energy equivalent of more than 4.5 million barrels of oil a day—the maximum the President said we will

FACT: Nuclear energy also helps fi inflation. The generation cost of electricity from oil fired plants was about 1½ times higher than from nuclear plants in 1978. The nuclear industry is participating in the national effort to make American energy safe and self-sufficient. We believe that all energy sources must be tapped—coal, synthetic fuels, solar and nuclear.

Nuclear energy is a proven technology, available today to help meet our nation's energy requirements, to help end dependence on foreign oil, and to help ease our balance of payments problem. Now is the time to use it.

AMERICAN NUCLEAR
ENERGY COUNCIL

(From the N.Y. Times, August 1, 1979)

Ah, yes, the people who created the energy crisis now are offering to solve it, with a little radiation thrown in free of charge. This ad contains the usual half-truths, including inflated estimates of nuclear plant output (which neglect the energy costs of plant construction, mining, enrichment, etc.) Cost estimates, of course, are based only on fuel costs and not the multi-billion dollar costs of nuclear plants and fuel-cycle facilities. In talking about independence from foreign oil, they don't mention the existence of the international uranium cartel.

But don't take the ad too lightly. The last time this vintage rhetoric was thrown around, during the 1973 oil crisis, it resulted in 35 nuclear plant orders. So at least the utility execs were convinced. Of course, the nuclear salesmen might have whispered something about "profits" in their ears which didn't show up in the public ads.

FOLLOW-UP DEPARTMENT...

Last month we ran an ad by Edward Teller, originally carried in the Wall St. Journal. We pointed out that Dresser Industries, the ad's sponsor, had been identified by NRC commissioner Peter Bradford as the maker of the valve that stuck open at Three Mile Island. In an indignant reply, Dresser defends their valve by saying, "It is not known whether the valve failed to close or merely leaked excessively."

The mere mention of Peter Bradford's name throws Dresser's James Brown into a tantrum: "These are sad times when someone of Mr. Bradford's persuasion holds a major sway over the future of an energy source that is so desperately needed by our country. It is even sadder that this wolf in sheep's clothing uses his politically-acquired title to attack the integrity of Dr. Teller, who is one of this country's greatest living experts on nuclear power and a man of great personal integrity and patriotism. . .

"It is tragic that at a time when this country-needs the facts necessary to develop all of its energy sources some people seek to interfere with the process throught speculation and innuendos intended to perpetuate the fear that has already been generated by non-experts. This is particularly true in the case of people of Peter Bradford's ilk who hold responsible jobs on regulatory agencies such as the NRC."

Brown's tantrum, however, was excised by the Wall St. Journal when it printed Dresser's reply.

STOP TRIDENT CONVERT LOCKHEED OCTOBER 28-29

Sunnyvale, California



LEAFLET & PICKET

MARCH & VIGIL

CIVIL DISOBEDIENCE

FRIDAY OCTOBER 26 - 3:00-6:00 PM

UNDAY OCTOBER 28 - 12:00 noon

MONDAY OCTOBER 29

Contact: Stop Trident/Convert Lockheed P.O.B.2324, Santa Cruz, CA. 95063 (408)425-1275

--STOP DIABLO JOIN THE BLOCKADE

"NO NUKES!" Is Not Enough Conference

A DAY OF DISCUSSION ON THE POLITICS OF THE ANTI-NUCLEAR MOVEMENT

SUNDAY, NOVEMBER 4
NEW COLLEGE 777 VALENCIA ST. S.F.

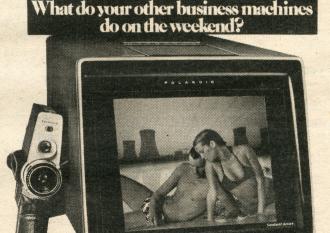
TOPICS TO BE DISCUSSED

- the culture and ideology of the anti-nuclear movement
- technology and the political economy of the nuclear industry
- strategy and context of the anti-nuclear movement

Special Guests NOT Appearing:

Ralph Nader Tom Hayden Jane Fonda Jerry Brown Jackson Browne

It's your turn to be the star



173 June 197

Sponsored by Collective Inventions, Direct Current (an Abalone Alliance affinity group) and the Union of Concerned Commies.