

It's About Times

Abalone Alliance Newspaper

June-July 1984



UC Berkeley's germ warfare connection

The University of California's nuclear weapons connection through its administration of the Lawrence Livermore and Los Alamos labs is well known. But the work of the UC Berkeley-administered Naval Biosciences Laboratory, which is vital to the US biological weapons effort, is virtually unheard of.

Although "offensive" research on biological weapons (BW) has been prohibited by international treaty since 1972, even the military acknowledges that the difference between "offensive" and "defensive" research is a semantic one. Defensive studies like the ones ongoing at the Naval Biosciences Lab (NBL) result in knowledge essential for BW use.

Established in 1934 in the campus' Life Science Building, the NBL played a major role in the military's BW research program during World War II. Drawing personnel from UC's brightest graduate students, the lab became a prototype for three other Navy facilities.

Since its inception, the NBL has been funded almost exclusively by the Navy to study the effects and properties of a mixed bag of the world's deadliest microorganisms. These include plague and *coccidioides immitis* (valley fever), a systemic fungal disease. It has also examined the dissemination of these agents using aerosols and insects.

The facility's first director, Captain Albert Krueger, wrote in a 1952 article in *The Military Surgeon* that a crash wartime program of secret BW research took place between 1943 and 1946. The lab tried to cover up its secret work by publicizing its unclassified research.

"Since security was a major consideration" during that period, Krueger explained, "it was decided to maintain a certain amount of work in the field of air-borne infections and to give the results of this program as much publicity as possible." Ironically, this research, which was supposed to distract attention from the lab's BW work, itself turned out to be crucial to the BW effort.

CBW: the other deadly cloud

On an average list of the threats to our survival, chemical or biological warfare would barely make honorable mention. The nuclear mushroom cloud has eclipsed all else and become the universal symbol of our common peril. But the same social currents which turned the discoveries of physics into the "ultimate" weapons of war swept through chemistry and biology even earlier in this war-maddened century, bringing forth other, silent clouds of equal deadliness.

For the last few decades, chemical and biological warfare (CBW) has seemed literally a remote topic. Reports have filtered in from distant battlegrounds — Iraq, Afghanistan, Vietnam, Yemen, Laos — of whole villages wiped out, of soldiers dying in agony. It seems not to matter if these reports are true; one superpower inevitably blames the other and chalks up another point on the atrocity scoreboard. The reports stop being shocking and become just more dubious grist for the Cold War pro-

Aerobiology forms the basis for understanding the suitability of disease-causing organisms for dissemination by air.

According to Roger Stanier, an internationally known bacteriologist and former UC Berkeley professor, Krueger was lying when he said that the lab stopped BW-related work after 1946. "The NBL was discretely camouflaged,"

he wrote, "but was in reality an agency of bacteriological warfare until 1969."

Stanier also commented that the NBL was well informed about the Army's 1950 open-air tests, which exposed more than a million Bay Area residents to *Serratia marcescens*, a supposedly harmless microorganism used to mimic the behavior of BW agents. But

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paganda mill. And powers both great and small continue to use CBW whenever they think the military advantage outweighs the bad publicity.

In the sheltered environment of the United States, only an occasional accident — and the Reagan administration's recent proposals for a greatly expanded chemical arsenal — have made CBW a topic for public debate. But there is little enduring opposition from a population whose knowledge of CBW is limited almost entirely to what the government chooses to tell it.

That was not the case sixty years ago, and understanding the special horror of poison gas requires returning to the trenches of World War I.

Death on the breeze

Late in the afternoon of April 22,

1915, the German guns bombarding Allied positions near Ypres, Belgium, fell silent. A gentle breeze blew from behind the German lines into the faces of the Allied soldiers, and a welcome break from the misery of the war seemed at hand. It did not last long.

At five o' clock, a sickly green cloud began to rise along four miles of the German lines as army specialists opened the valves on 6000 cylinders of liquid chlorine. The cloud grew denser and higher as the cylinders' contents vaporized and hissed out, and 160 tons of chlorine — a malign fogbank five feet high — rolled through No Man's Land toward the Allied lines.

In less than a minute the cloud arrived, so thick that the soldiers could no longer see each other in the trenches.

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Letters



LOSING THE BATTLE

Dear IAT,

We're winning the war, but losing the battle. As stockbrokers across the nation were urging their clients to dump any utility stock with a nuclear plant in its energy arsenal, PG&E was given a license to start low power testing at Diablo. As upsetting as that was, it was devastating to witness the shambles of the Abalone Alliance in its response to that crisis. There was no effective protest (media or otherwise) to this long-awaited development.

Assuming we had the power to prevent Diablo from operating, why did we fail?

- Centralized decision-making in San Luis Obispo. Although the Alliance used an apparently "open" process for strategizing, San Luis made all the decisions on what form the strategy to oppose Diablo was going to take. Staff of the Diablo Project Office and the local group (People Generating Energy) can deny this until they are blue in the face, but the facts are that they got their way.

It was easy to manipulate process by being the locals, the ones affected by the plant. They were in the know and we trusted that they "knew best." Organizational structure disempowered individuals who did not have an active local group in their area — there was no method to accept their ideas or appreciate their contribution. The majority of meetings occurred in San Luis Obispo, making attendance at many collective meetings impossible. (Who from Santa Rosa could attend an outreach meeting at 11 a.m. on Thursdays?)

- Lack of creativity. In 1977 there was civil disobedience at the plant. Again in 1978. And 1981. And 1984. I'm not saying that CD shouldn't have gone on at the plant on a continuous basis. But those efforts should have been to mobilize local people and not statewide people, especially after the 1981 Blockade. After that action, unlike the earlier ones, it was clear that we would have time to strategize before PG&E was granted a license. We had two and a half years to strategize. And strategize we did. Ultimately, we came up with Blockade '84. It failed to attract the attention of national media, the faith of "ordinary" people that it would work, and the imagination of a new group of potential activists.

We didn't challenge ourselves. Instead of doing outreach to possible new constituencies, we did inreach to those already convinced. Most importantly, there was always the feeling that unless you came down to SLO and got

arrested you weren't really going to help stop the plant — a not so subtle form of emotional blackmail that in the final analysis did not work. Also in this category is the DPO's rhetorical — rather than real — support for actions and strategies not based in San Luis (i.e. the Public Utilities Commission Campaign).

- The discontented threw in the towel. Many of us were unhappy with the shape of organizing coming from San Luis. We did not confront this in a unified manner. People didn't believe that confrontation would work and given the undemocratic nature of past decisions (such as allowing Governor Brown to speak at the 1979 rally) didn't feel it was worth taking on the powers that be.

- Inability to recognize new political movements. This was true especially for the growing civil disobedience movement against nuclear weapons. Instead of welcoming this development, the Alliance jealously guarded information, skills and power. In an effort to keep the focus solely on Diablo, we weren't responsive to weapons groups (Livermore Action Group in particular) until they exhibited their own power and constituency.

So what do we do now? And why am I writing this anyway? Well, after I heard that there are plans floating around for yet another mass action in August at the Diablo plant, I couldn't take it anymore. What a phenomenal waste of time and energy! The last thing the antinuclear power movement needs is to further alienate the public. We must think of ways to recapture our lost audience as well as develop strategies which will continue to put pressure on both PG&E and the nuclear power industry. I don't believe that another action at the gates or in the back country of Diablo will meet this challenge.

I have heard that the Alliance may be considering a rate strike. Addressing the economic impact of the plant on PG&E ratepayers has tremendous organizing and politicizing potential. It's a great step forward. But I hope that those taking on such a project realize the enormity of the task at hand. Research into current regulations will need to be done. Working with different organizations will be critical. Developing strategies to deal with people's fear of having their electricity turned off will be essential. And that is only a beginning of what will need to be considered.

It is vital that we begin this next piece of organizing now, before the utility is too far ahead of us. In order to regain our lost credibility, and to help pound the final nails into the coffin of nuclear power, we must shift our focus away from CD at the plant site. The grassroots antinuclear power movement is at a turning point. We can either go on as we have for the past three years or we can get out the shovels and dig the grave for the nuclear industry's coffin.

— Cynthia Sharpe
former AA staff

NEW AGE-ISM

Dear IAT,

Recently I was invited to speak at the Whole Life Expo in San Francisco on a panel called "Strategies for Peace." My impression of the Whole Life Expo from previous years is that it is a sort of

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New Age health and trade show where lots of money could get spent, but few ideas of social relevance could get exchanged, so I was rather pleased that they were at least opening the door to dialogue on the social issues. One of the reasons I decided to participate was to be able to make the point that if one wants peace one must work hard for justice. I also wanted to talk about the impact of the nonviolent direct action movement in California over the last six years.

The physical layout of the panel had us, the "experts," on an elevated platform, and them, the audience, in straight rows of chairs below. The four of us panelists gave short ten to fifteen minute presentations and then the dialogue was open to the audience. The moderator was a classic example of the 1970s Human Potential Movement, a movement I left ten years ago in disgust because of its focus on the "me first generation" and its outright denial of anything political or "negative." At one point he stated, "The highest form of protest is to bring in the new — not to protest the old."

The idea that one can blithely bring in the "New Age" while ignoring the present social-political realities is an isolationist luxury that the majority of the world's people cannot afford. To me it suggests that the person who feels this way is so unaffected by those realities that they can choose this path to blissdom. This statement also assumes that the present movement for social change is *only* protesting the old and *not* addressing itself to creating new models. Searching for new ways is exactly what the direct action movement is all about, and while our process gets downright crazy sometimes, that is just what it is — a process to learn new models and to relate to one another in a non-hierarchical fashion. We also don't charge anything for our all-day workshops, which is no doubt a rather foreign concept to anyone in the HPM, where "leaders" charge high prices for their skills.

After the panel was over, one of the other panelists invited me to come to a conference retreat in May in the Santa Barbara hills with other "leaders" of the peace movement. I tried to explain, again, that some of us were trying to build a movement without the concept of "leaders." When I inquired about the cost of this three day retreat, I was told that it was a sliding scale of between \$150 and \$250. By that time I was so exhausted from the whole experience that I didn't tell him that the Abalone Alliance puts on its three-day retreats for about \$15 to \$20. (Well, maybe it's up to \$25 now with inflation.)

Now this person was an eager, pleasant young man who travels around the country singing songs like "Hundredth Monkey." It's very cute and catchy, but its analysis of the situation stops short of the monkeys learning to wash the sand off their sweet potatoes. By now let's hope that we've all "got" the concept of the "Hundredth Monkey" as it applies to the antinuclear movement and can get on to some of the reasons (like Boho mentality) that explain why we have nukes, war, and the "isms" in the first place.

I'm getting really tired of the "New Age" simplistic, elitist drivel that tries to deal with oceans of social problems without getting their feet wet. The fact that this panel was called "Strategies for Peace" without the inclusion of justice was indicative of the single issue focus of this kind of thinking.

And what about the strategies that were forthcoming? Well, one panelist, a psychotherapist from Marin, talked about having peace circles and meditating for peace. That's all fine and good and certainly "positive," but a holistic approach is going to have to include putting one's body where one's mind and spirit are. It's also going to have to include giving up the "expert" status and the financial rewards that go along with it. It seems to me that we need *extensive* dialogue in the movement for social change if we are ever going to achieve justice and peace and that means recognizing and dealing with the "negative" that exists in the world. It's just too dangerous to think that we can apply light-weight, simplistic solutions to the heavy-duty, multi-faceted problems we face. I'm proud to be "anti" when it comes to corporate murder and the raping of our planet. I'm also very "anti" when it comes to condescending liberal platitudes that sound good but have no substance.

— Mary K. Moore

THE POWER CONNECTION

Dear IAT,

Was disappointed you didn't take the opportunity in your "Massive Radiation Accident in Mexico" piece, April-May 1984, to explain to the folks that cobalt-60, the stuff spilled in Mexico, is also a "byproduct" of nuclear power plants and is routinely released by them. It would have been a good time to review the facts about it: radioactive half-life 5.2 years, etc., especially how cobalt-60 is made from cobalt-59 by neutron bombardment in nuclear reactors.

For me the Mexican spill is the handwriting on the wall.

— Louise S. Weiss

It's About Times

Abalone Alliance Newspaper

It's About Times is the newspaper of the Abalone Alliance, a California antinuclear / safe energy organization consisting of over 50 member groups (see page 15). The opinions expressed in *IAT* are those of the authors and are not necessarily endorsed by the Abalone Alliance.

It's About Times is a project of the American Friends Service Committee. *IAT* is published six times a year. The annual subscription rate is \$8.00.

IAT welcomes letters, articles, photos and artwork, but reserves the right to edit them.

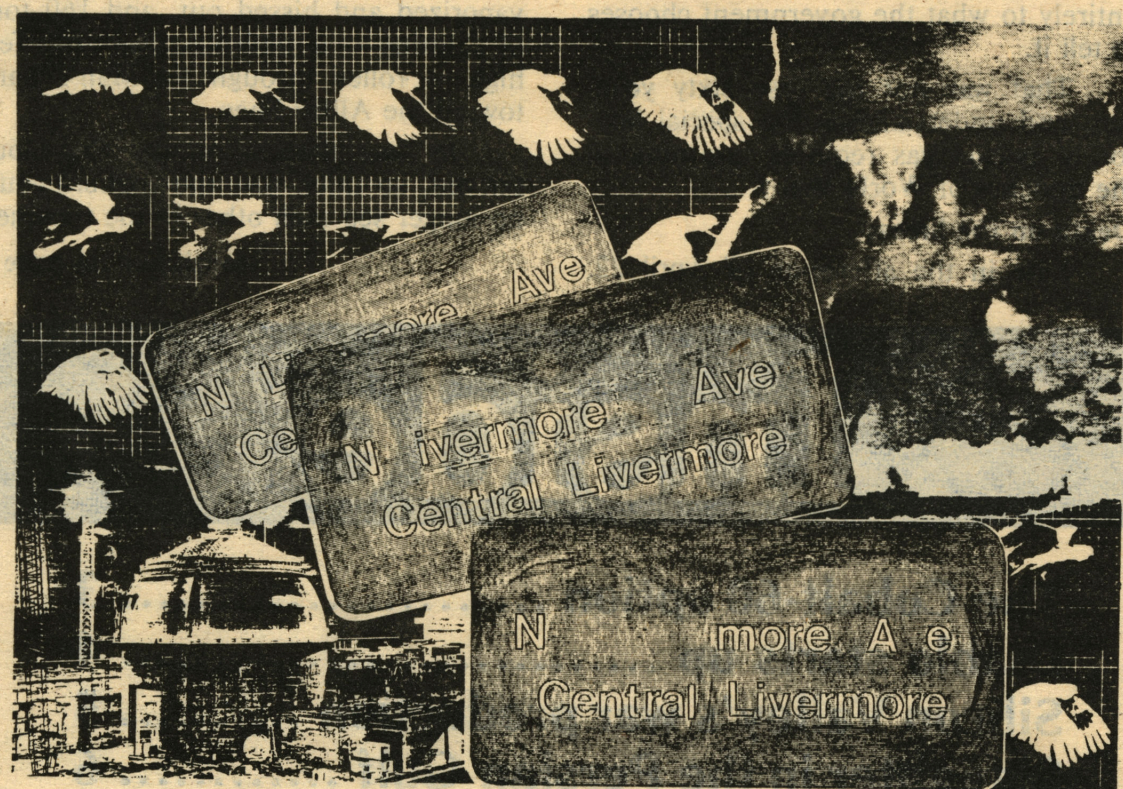
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Leigh Kienker

hats off
to the I-580 graffitiists!

Rush to irradiate: the Cobalt-60 option

The Federal government is making bold decisions about what we eat these days. On February 4, Environmental Protection Agency chief William Ruckelshaus banned the use of ethylene dibromide, or EDB, on grain products, acknowledging years of evidence that the pesticide is a dangerous carcinogen. A mere eleven days later, Health and Human Services Secretary Margaret Heckler announced that the Food and Drug Administration is approving a new method to preserve fruits and vegetables and protect them from insects: exposure to radiation.

"Thirty years of research have shown that the proposed levels of irradiation are safe," Heckler said. She pointed out that the method has been used in 28 countries, and on the food of US astronauts and servicemen. Heckler neglected to mention that in 1968 the FDA warned the Army that feeding soldiers irradiated ham could have a "highly significant effect on the reproductive process" and that there was the "possibility of increased risk of cataracts and tumors." To be fair, Heckler wasn't talking about zapping meat — at least not right now.

The press knew this was going to be a controversial issue, so they found the most logical speaker for the other side, radiation expert Dr. John Gofman of UC Berkeley. Gofman and Heckler battled it out on a TV morning news show shortly after the announcement.

In an interview with *It's About Times*, Gofman had choice words for the FDA proposal. "If Margaret Heckler says irradiation is safe then Margaret Heckler is lying," he said. "If there are 28 countries using this process, that just proves there are irresponsible people all over the world. The fact is that there is not a shred of evidence on the long term safety of this process. It's only decent that you tell people the truth — that we don't know the truth."

If we don't know the truth, what do we know about irradiation?

First, we know how it works: food is exposed to gamma rays from cobalt or



the safety of irradiated foods, admitted that negative effects had been found in some experiments. Studies which used up to 35 percent irradiated food in test animals' diets "had to be terminated because of premature mortality and/or morbidity." The FDA blamed these effects on drastic changes in the animals' diets during the experiments, however, and not on chemical changes in the irradiated food.

chicken could appear to be harmless."

They also note that the widespread use of irradiation may produce radiation-resistant bacteria, an effect which has already been seen in laboratory studies.

- **No labelling requirements.** The FDA is proposing that irradiated foods need not be labelled. Aside from the argument that consumers have the right to know what they're eating, not labelling could pose hazards. How will workers in a food-processing plant know if a shipment of foods has already been irradiated? What if a load of produce gets irradiated twice by accident? How about three times? At that point you could be dealing with toxic food. Chances are, however, that the FDA will bow to the food industry's concerns that no one will buy anything labelled "treated with gamma rays."

- **Transportation hazards.** Establishing irradiation facilities will cause a quantum leap in the amount of radioactive materials transported on our highways, increasing the risk of accidents. According to Tucker and Alvarez, a variety of transportation accidents involving scientific or medical radioactive sources have already occurred in recent years.

They cite a number of examples,

are not supposed to exceed 5 rems, and there is considerable evidence that even this level carries a significant cancer risk. Since food irradiation plants will use extremely powerful radiation sources, capable of producing doses of 100,000 rems in a few minutes, the potential for overexposure is serious. Even short accidental exposure to the unshielded radiation source could be fatal — a whole body dose of between 300 and 500 rems is considered to be lethal to half of those exposed.

The FDA is not proposing to require even minimal training for irradiation equipment operators in "radiation health physics, dosimetry, worker safety, and proper record keeping." In fact, under the proposed regulations a Spanish-speaking migrant worker could legally be placed in charge of food irradiation equipment with English instructions. The inadequacy of these regulations is underscored by the fact that in 1983 the Nuclear Regulatory Agency took enforcement action against 26 sites with licenses to handle radioactive materials for poor employee training in radiation procedures.

The DOE connection

Tucker and Alvarez assert that the US government is advocating food irra-

Some animals fed newly-irradiated wheat have developed extra sets of chromosomes.

cesium isotopes. The rays kick electrons out of the atoms in the food, and these atoms become electrically charged ions. The ions create unstable molecules called "free radicals."

At low radiation doses these free radicals slow down cell division and growth. This stops potatoes from sprouting. Higher doses kill bacteria that spoil meat and fish. Even higher doses kill insects that eat fruit, vegetables, flour, and grain.

One thing is certain: this kind of irradiation doesn't make food radioactive. In fact, it may have certain benefits. Irradiation could eliminate the need to preserve meats with sodium nitrite (a suspected carcinogen) to prevent botulism. It might extend the shelf life of fresh foods and, if safe, would be better than pesticides like EDB.

But serious questions have been raised about this process by critics of government health standards. Here are some of their objections.

- **Toxic by-products.** Gamma radiation causes the formation of little-understood chemical compounds in food. There are about 42 of these Unique Radiolytic Products, or URPs, which are known to result from the irradiation process. In 1980, the FDA said some of them might be toxic and that they require further study.

Linda Pim of Canada's Pollution Probe Foundation cites a number of animal studies that raise concerns about radiation treated foods. Some animals fed newly irradiated wheat have developed extra sets of chromosomes. In one experiment, the weight of the reproductive organs of rats that ate irradiated onions changed significantly.

Even the FDA, in its recently issued recommendations for evaluating

- **Nutrition loss.** Irradiation destroys vitamins — specifically vitamins A, B, C, and E. Supporters of irradiation say that food can be enriched to replace the lost vitamins. But based on past experience, Beatrice Hunter, nutrition expert and author of *The Great Nutrition Robbery*, doubts that simply adding vitamins will work. She points out that these supplements are often poorly absorbed by the human system and are improperly balanced with other nutrients. This is a particularly serious issue for people in the Third World who depend on only one or two foods for their entire diet. Vitamin-depleted irradiated foods exported from the US could gradually kill them.

- **Increased aflatoxin levels.** Aflatoxins are poisons naturally produced by fungus spores on grains and vegetables, and are considered to be 1000 times more carcinogenic than EDB. A study done at the National Institute of Nutrition of the Indian Council on Medical Research found that irradiation may increase the amounts of aflatoxins in foods by producing mutant fungus spores or altering fatty acid levels in the food, producing conditions more favorable to fungus growth.

- **Radiation-resistant organisms.** According to a report on the FDA's proposed regulations by Kathleen Tucker of the Health and Energy Institute and Robert Alvarez of the Environmental Policy Institute:

"Irradiation intended to eliminate one food hazard may intensify others. Salmonella strains infesting chicken and fish can be killed with radiation, but botulism strains that survive have less competition for growth. The more resilient botulism strains can multiply more rapidly, and since other microorganisms that make spoiling food smell bad are destroyed by radiation, dangerous fish or

The DOE is spending millions to get its radioactive wastes out into the commercial sector.

including an incident in Knoxville, Tennessee in the summer of 1982 where a cylinder of radioactive tritium fell off a delivery truck; another in May 1982 when a passerby recovered a container of iridium-192 that fell off a truck in Downey, California; and what an EPA spokeswoman described as a "somewhat routine traffic accident" in which two canisters containing iridium-192 fell off a truck transporting them from Jersey City on September 22, 1980.

Pointing out that the Transportation Department has fewer than 20 inspectors in the country for all hazardous cargo shipments, Tucker and Alvarez question whether the federal government, with its already poor track record, can guarantee safety regulation enforcement with the massive increase commercial irradiation will add.

- **Worker health and safety.** OSHA standards would apply to worker radiation exposure at food irradiation facilities. Annual exposure limits for workers

diation by gamma sources, principally cobalt-60 and cesium-137, because the Department of Energy wants to find ways to make money out of their enormous volumes of radioactive wastes.

"The Energy Department, which is the largest subsidizer of food irradiation, is working to undercut all other modes by leasing cesium-137 sources at 10 cents a curie, undercutting the market rate of \$1.00 a curie for other gamma sources. . . . Moreover the DOE is offering to develop transportation casks, and is building a major cesium irradiator in Miami which will house about 1 to 3 million curies. They are also working to build two mobile irradiators which will travel through farm areas to promote food irradiation by demonstrations. With the biggest stake in food irradiation, the DOE is spending about \$15.6 million in FY 1985 directly and several million indirectly to get its radioactive wastes out into the commercial sector."

— Matthew Lasar

Diablo starts up amid continuing opposition

Low power testing is underway at Diablo Canyon, but groups opposing the plant are not giving up.

"The struggle is by no means over," Abalone Alliance Guides Collective member William Meller explained. "There are people living here who cannot stop organizing — it's too important. Another Diablo action will emerge."

"It's going to be an uphill battle for us," Sandy Silver of the Mothers for Peace added. "After the low power license was issued, the mood was down, but there was also a quiet determination that PG&E and the NRC hadn't seen anything yet."

Currently Abalone Alliance state office staff members are organizing a rate strike. The Mothers for Peace are seeking endorsements from city councils asking the Public Utilities Commission not to charge the ratepayers for PG&E's mistakes.

The April 13 decision by the NRC to grant a low-power test license to Diablo Canyon took place after NRC inspector Isa Yin retracted statements made

workers removed 300 defective shock absorbers. The utility, however, requested permission to begin full power operation before completing all the repairs. A vote on full power operation is scheduled for July.

Both Democratic and Republican members of Congress have requested that Morris Udall, chair of the House sub-committee on Energy and the Environment, hold additional counter-hearings on the NRC's handling of Diablo Canyon. Pressure from the nuclear industry has successfully delayed scheduling such hearings.

Despite Udall's foot dragging, the Mothers for Peace are pleased that Walter Mondale came to San Luis Obispo and spoke out against the plant. All three Democratic candidates had been asked to oppose Diablo, and Mondale was the first to step forward. Addressing a rally of 3,000 people, Mondale proclaimed, "For too long this country has been weighing cost vs. safety and the cost always wins. It's time to change that at Diablo." After the speech, the candidate issued a written

After fissioning began, plant operators declared an "unusual event" when the cooling system started leaking.

two weeks earlier claiming disputed pipe-hanger analysis techniques made low-power testing dangerous.

Insisting that no one pressured him into changing his mind, Yin told reporters, "It's the uncertainty that was the main issue, not any actual hardware problems." However Yin did admit, "The utility was under tremendous pressure to put the plant into operation. We're talking about big bucks," and said that this affected his decision to withdraw opposition to low power testing.

NRC officials assured Yin full power operation would not begin until inspectors reverified the calculations in designing 400 pipe supports, and PG&E

statement saying he didn't oppose nuclear power plants in general.

Meanwhile, PG&E sub-contractors paid a group of workers a half day's wages to be bussed to the rally and boo Mondale.

Bugs delay testing

The testing of Diablo Canyon at low power was not without problems. A faulty pump delayed start-up of the reactor until the end of April. Six hours after fissioning began, plant operators declared an "unusual event" when the plant's cooling system started leaking three gallons a minute. Although testing has not begun on Unit Two, it is also

Redwood Alliance fights Humboldt charges

PG&E wants profits from dead nuke

With license in hand to operate Diablo Canyon, Pacific Gas and Electric asked the California Public Utilities Commission for a financial bailout for their first failed nuclear power plant at Humboldt Bay. The Nuclear Regulatory Commission ordered the plant closed in 1976 because it could not withstand potential earthquakes in the area. PG&E now wants to charge ratepayers \$88 million — \$50 million for seismic retrofitting done after the closing and \$38 million for the original construction costs and profits on its investment that PG&E never recovered.

The Abalone Alliance member group Redwood Alliance is the legal intervenor in the case. Pat Agnello, representing the Humboldt County-based group, explained, "We're arguing the ratepayer should only pay 13/30 of the cost of decommissioning because the plant operated for only 13/30 of its projected life."

The Redwood Alliance is also opposing PG&E's request to charge ratepayers the \$50 million for seismic retrofit because the money was spent after the NRC ordered the plant closed. "PG&E failed to determine if any surface faulting existed on the plant site before spending millions of dollars retrofitting the plant to standards that had yet to be determined," added Scott Fielder, also of the Redwood Alliance.

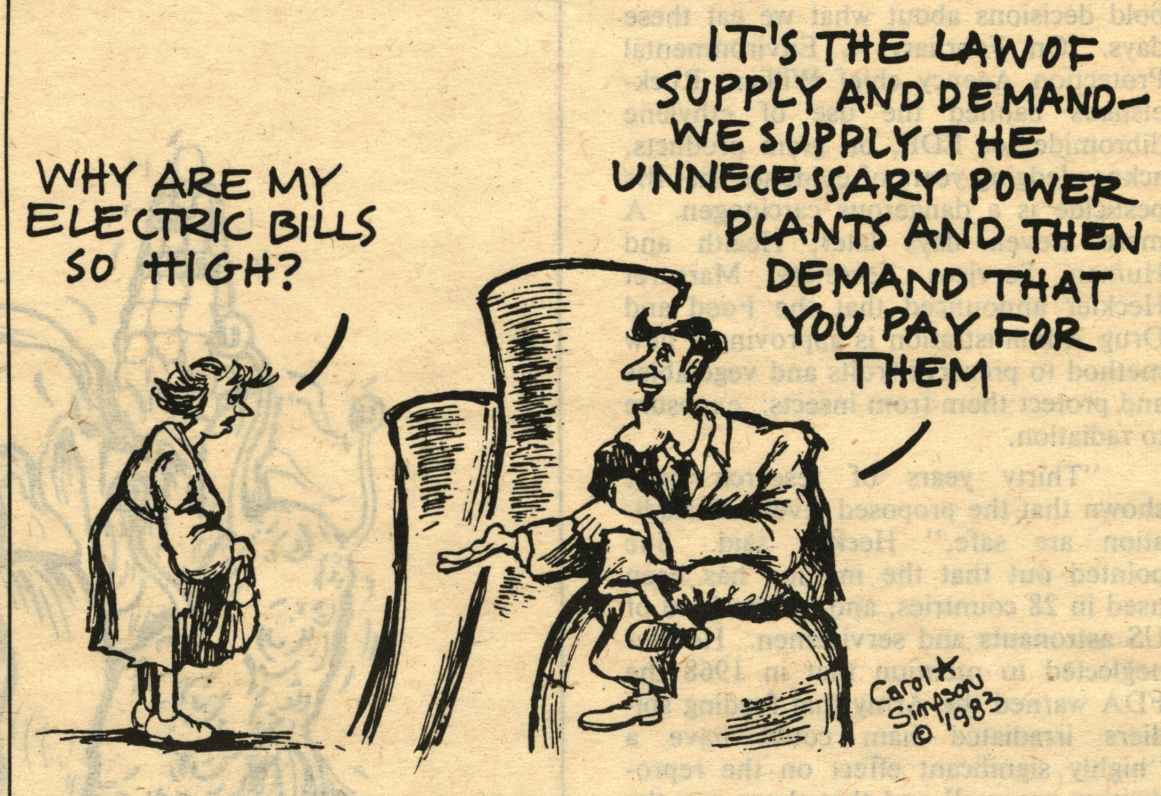
"It's always been our contention that PG&E didn't want to be embarrassed decommissioning a nuclear power plant because of earthquake problems, while at the same time trying to open Diablo Canyon," Alliance member Carl Zichella explained.

Redwood Alliance representatives pointed out that PG&E never wanted to understand the earthquake problem in the area. Utility management built the plant knowing that an earthquake in 1865 destroyed the city of Eureka. The utility's consulting geologists were the same individuals who argued the abandoned Bodega Bay Atomic Park could be built safely 1000 feet from the San Andreas fault.

Humboldt opened in 1963 as a test reactor. Atomic Energy Commission (AEC) safety standards were not as strict for a test reactor as a commercial plant. When PG&E applied for a commercial license in 1969, the AEC ordered the utility to undertake additional geological studies to prove the plant safe. PG&E hired Earth Sciences Associates to do the work, the same organization that failed to find the Hosgri fault offshore from Diablo Canyon. The team also missed faults at PG&E's abandoned Davenport and Point Arena nuclear power plant sites.

The Atomic Energy Commission never accepted PG&E's geology studies conducted at Humboldt Bay. Each report described geological problems, but none offered adequate mitigation measures. Eventually geologists not working with PG&E located three faults surrounding the plant.

Administrative Law Judge Randy Wu, impressed with the evidence introduced by the Redwood Alliance, ordered PG&E to answer the questions about the wisdom of spending \$50 million on seismic retrofits before determining the extent of earthquake faults in the area. The hearings will resume in San Francisco in July.



having problems. Technicians inadvertently discharged a non-toxic dye into the Pacific Ocean when tracking the flow of coolant through the condenser.

Plant workers continue to come forward, bothered by the practices they've seen and are still seeing. NRC official Tom Bishop, overwhelmed by the number of whistle blowers, has finally agreed to sit down and talk with the workers. Tom Devine, attorney for the whistle blowers, said, "Our intent is to push the system until it responds, or until it become obvious that the system can't do what it's supposed to do."

suggest that rather than being a strike-slip fault, the Hosgri is a thrust fault.

A quake on a thrust fault has vertical rather than horizontal shake, and the intensity of shaking is greater than on a strike-slip fault. "This raises a whole new set of questions," Mothers for Peace member Nancy Culver explained.

However, the NRC staff is not recommending that full power operation of Diablo be delayed in order to study the implications of the new findings. Officials are satisfied with PG&E's suggestion that it conduct its own investigation *four years from now*.

New studies indicate that the Hosgri fault could actually run beneath the Diablo reactor itself.

Once upon a fault

New studies released by geologists indicate that the Hosgri earthquake fault, originally thought to be three miles offshore, could actually run beneath the Diablo reactor itself. The studies also

The People's Emergency Response Plan

The Abalone Alliance's People's Emergency Response Plan ended when the low power test license began. Organizers working with the Diablo Project office consider the four-month demonstration a success.

"We met four out of five of our original goals," Guides Collective member William Meller emphasized. "We provided a vehicle for protest utilizing both civil disobedience and legal activities. We provided a sense of community not only for organizers of the event, but for the people in San Luis Obispo who provide housing for out of town demonstrators. And we've provided education and outreach. Teachers are inviting us into the classroom to talk about Diablo. We didn't stop Diablo, but we're continuing to apply pressure."

Five hundred and sixty arrests took place during the demonstration and thousands more participated in legal activities. All told, more than 3000 arrests took place during the seven years of Abalone Alliance demonstrations against the plant.

Meller emphasized the subtle abstract value of civil disobedience when evaluating the effectiveness of the People's Emergency Response Plan. "When you try something like stopping the licensing of a plant, there are no instruction books. You have to muddle through somehow. After you come out, you know you've made a contribution — that's the first level of effectiveness."

Ian McMillan, a legal intervenor since 1966, and one of the first people arrested protesting the plant, has watched the community change over the years. In the early days only a few individuals spoke against the plant, and fewer still were willing to do anything about it. Recalling his motivation for getting involved, McMillan said, "I was of the opinion you had to make a showing. Even if you don't win your goals — you have to ask, what would have happened if we did nothing? If it hadn't been for us — the Abalone Alliance and the Mothers for Peace — that plant would have started operating ten years ago."

PG&E's financing plan is to collect \$3.4 million a year from the ratepayers for 15 years and put the money aside in a separate interest-bearing account. By the year 2015, \$603 million will have been collected, which the utility anticipates will be enough to bury the nuke that cost \$27 million to build.

Ironically, that is the year Diablo Canyon will leave service — provided nothing goes wrong. Humboldt is one fifteenth the size of one reactor at Diablo. The utilities owning Rancho Seco and the three reactors at San Onofre 2&3 will also be looking for burial sites at about the same time.

— Mark Evanoff
IAT staff

— Mark Evanoff
IAT staff

Working for war in the Silicon Valley

Armed security guards greet workers at Lockheed Space and Missile Company in the lobby of Building 253, one of dozens that protrudes from the concrete acres of Moffett Field. The guards hand out and collect encoded employee badges with various security clearances. Occasionally, they lead workers into a screening room where purses, briefcases, and persons are probed, electronically and otherwise. The lobby bristles with technical chatter: Lockheed staff conduct their business with vendors there to avoid the red-tape of obtaining temporary clearance for callers.

Security protocols are a way of life for many in Silicon Valley, the hub of the Pentagon's military electronics and missile industries. As many as 50% of Silicon Valley workers depend on military contracts for their livelihood. Per capita, Silicon Valley is the most defense-dependent area in the country. In fiscal 1982, nearly \$4 billion in military contracts were awarded to Valley companies. In 1983, Lockheed, and FMC — the Valley's largest military contractors — together received roughly \$2.6 billion in government contracts.

In recent years, technical workers in Silicon Valley have

- researched and developed the launch vehicles and guidance systems for the cruise and Pershing II missiles,
- designed and produced a new generation of Trident missiles,
- set up the command and control of a global military satellite surveillance system,
- brought to life the Pentagon's official computer language, ADA, and
- developed voice-activated aviation targeting and firing systems.

But the Pentagon connection is not apparent. Instead, an unspoken, collective avoidance of the military role in the Valley infects daily life, on and off the job. Corporate culture, the structure of the military industry, and a stupefying division of labor encourage a view of military-related work as "just another job."

In Silicon Valley, avoidance and ignorance of the Pentagon connection are socially acceptable and materially rewarding. Avoidance and ignorance also smooth the edges of the personal dilemmas associated with making tanks and missile chips for a "living." As a result, most Valley workers and residents,

including those who take patriotic pride in their work, tend to know very little about the connection.

Consuming culture

The glitter of consumer electronics (whose many components include some derived from military R&D) permeates Valley culture and distorts the connection. Consumer electronics — personal computers, digital watches, video recorders, and games — are apparently what the electronics industry is all about. Valley billboards and radio and TV ads allure disposable income with electronic consumer items, the latest of which are displayed in conspicuous abundance in Valley malls.

But by some measures, the Valley's 200,000 high technology workers create products predominantly for the government's war-making and intelligence-gathering bureaucracies like the National Security Agency. (Of the \$7 billion in R&D that Silicon Valley firms attracted in 1982, approximately 54% went for military-related projects.)

Other products are purchased by huge financial concerns like Bank of America. (Valley firms make tapes, disks, disk drives, and word processing and communication systems used in offices everywhere.) Far from reflecting a preference for consumer electronics, the growing microelectronics industry is being molded by military and corporate needs.

This means that most Silicon Valley workers have very limited direct contact with, much less control over, the immediate objects of their labor. Military workers, for example, experience the missile they build at Lockheed, the helicopter gunship they program at Singer Link or Dalmo Victor, or the tank they design at FMC through a media account of its deployment thousands of miles away.

The distance obscures. If the only immediately consumable products of labor are digital gadgets that are seen as amusements and distractions, then the myth of consumer electronics becomes grounded and reinforced by direct experience.

Sadly, even traditionally muckraking media like *Mother Jones* misunderstand and thus help make plausible the myth of consumer electronics. In a feature article on Silicon Valley, ("Fast Times for High Tech," December 1983), David Talbot lavishes kind words on the "microchip moguls" and harsh



words on critics of high technology. But he avoids even passing reference to the Valley's ominous and imposing military connection.

Less surprising but no less disturbing is Rogers and Larsen's new book, *Silicon Valley Fever: Growth of High-Technology Culture* (Basic Books, NY, 1984), in which military production in the Valley merits all of thirteen sentences. Rogers and Larsen portray consumer electronics maker Apple in mythic proportion as the prototypical Silicon Valley corporation.

Rippling the connection

Another barrier obscuring the connection is the structure of military contracting and subcontracting. In 1982, over 500 Valley companies received Department of Defense contracts worth \$10,000 or more. However, hundreds more companies received subcontracts from the prime contractors.

This ripples the connection, making it difficult to track even for those who want to know. Subcontractors sell chips, boards, cathode ray tubes, and accounting programs to other companies who in turn may sell to the Pentagon. Often, the subcontracting path to the Pentagon is several corporate layers deep. The maze of military subcontracting suggests that workers who try to escape a job with a military contractor may find a place in "civilian" industry only to discover there a subcontracting relationship to a military supplier.

Another blurring of the connection takes place every day in the organization of work. On the production line, a stultifying division of labor not only makes work tedious, but also renders any individual's awareness of the end product or service unnecessary. From the management perspective, such awareness is especially undesirable if military goods or services are involved.

Even in highly technical fields like hardware engineering and software programming, the division of labor is often such that the assumptions and working knowledge required to complete most tasks bears no relation to the product's application.

An electrical engineer designing the logical structure of a chip need not know (and often does not know) that the chip will store microcode for an on-board missile guidance system that may one day vaporize hundreds of thousands of people. All the logic designer need know is whether the chip's internal components — a cluster of "on" and "off"

switches — perform to mathematically derived standards.

Communications technicians who monitor and relay incoming and outgoing data at the USAF's Blue Cube Satellite Control Facility need not know the content of the data to successfully carry out their jobs. In fact, much military intelligence data received and transmitted from the Blue Cube is automatically encrypted by Pentagon and National Security Agency devices.

With the "need to know" policy administered by military contractors such as Lockheed, the ignorance imparted by the division of labor may take a quantum leap. The "need to know" policy presumes that in classified military R&D work, the best possible workplace atmosphere is ignorance. Project information is strictly and hierarchically controlled. Its public rationale is to minimize the possibility of espionage; its practical effect on the daily lives of workers is to stifle social awareness of the hostile technology they create. (For more on the division of labor in technical work, see "Sil Val: The Chips of Our Lives," *Processed World* #10, 55 Sutter St. #829, San Francisco, CA 94104.)

The Valley's economic dependency on the Pentagon cuts the other way, too. Military industry workers — programmers, engineers, scientists, drafters, assemblers, etc. — are considered a "strategic resource" by the Pentagon. (Classified jobs at military contractors have traditionally qualified draft-eligible employees for deferments.)

The Pentagon's dependency on Valley workers and installations suggests the leverage that military-industry workers could wield; they have the capacity to subvert, sabotage and otherwise neutralize the military installations and weapons systems they produce, service, and operate.

For example, the labyrinth of security measures deployed by Valley military contractors may provide a sinister glimpse of just how far the government is willing to go to intimidate us. But the vast majority of security measures are useless against a collective resistance — in particular, against a technically skilled resistance.

In the meantime, ignorance remains an effective cover for the connection, creating a viable option for workers who, consciously or otherwise, ignore the human terror their labor makes possible. In ignorance we acquiesce.

— Melquiades

Beginner's Guide to Silicon Military Contracts

CORPORATION/ INSTALLATION	WEAPON/ SERVICE	MILITARY SALES
Lockheed Missiles & Space	Polaris, Poseidon, Trident I & II, military satellite systems	\$1.6 billion (1982)
FMC	Pershing II launcher, Bradley tank, M-113 armored personnel carrier	\$1.1 billion (1982)
Moffett Field	Navy Western Theater Air Hdqrs, Nuclear weapons-equipped P-3 Orion anti-sub planes, NASA/Ames research	?
GTE/Sylvania	Ground-launched cruise, communications jamming and anti- jamming devices, missile tracking systems	\$218 million (1982)
Westinghouse	Cruise launch subsystem, Navy missiles, nuclear power plants, electronic warfare, navigation, guidance, reconnaissance systems	\$95 million (1982)
The Blue Cube	Air Force military satellite control facility (National Listening Center)	?
United Technologies	Trident II engine and propellant, MX and cruise contracts	\$70 million (1982)
RoIm	Military computers, Pentagon's ADA Compiler, ship- and ground-launched cruise guidance systems, military communications systems	\$62 million (1982) (Silicon Valley only)
Martin Marietta	Pershing II missile, MX missile system, Navy tactical surveillance system, Army Copperhead cannon projectile, Patriot Air Defense (sic) missile system contract	not available

Western aid fuels Persian Gulf slaughter

As the US media focus attention on recent attacks on Western shipping in the Persian Gulf, the real story of the Iran-Iraq conflict is not being told: that the governments of both sides are inflicting this bloody war on their own people as much as on each other, and are doing so with the support of the industrialized West, particularly the US.

The costs to each country of what is starting to be acknowledged as "the most barbarous, bloody war since World War I" (Flora Lewis, *New York Times*, April 21, 1984) have been obscenely high. Iraq's wholesale bombing of civilian areas early in the war created as many as two million refugees, while Iran's strategy of massive "human-wave" infantry assaults against well-fortified Iraqi positions has produced anywhere from 150,000 to 500,000 dead on each side. Twice as many have been wounded, maimed and shell-shocked, many of them under 15 or over 60 years old and many of them non-combatants.

Both regimes have used the war as an excuse to militarize their societies and to consolidate strong authoritarian control over their populations. Wage freezes coupled with inflation, shortages of basic commodities, and repressive labor legislation have been forced upon the people of both Iran and Iraq.

Iraq's Saddam Hussein, much like the Ayatollah Khomeini, has tried to build a personality cult around himself based on becoming militarily and ideologically the dominant power in the Middle East. The two nations have succeeded primarily in neutralizing each other and dividing the Arab world, to the satisfaction of both the United States and Israeli governments.

Neither Iraq nor Iran has an official American Embassy on its territory, yet both have become economically dependent on Western help to a degree unforeseeable in 1979, when Iraq was primarily armed by the Soviet Union and Iran had just overthrown the Shah, its US puppet dictator.

Iraq's war effort has been bankrolled to the tune of \$35 billion by the most conservative, pro-US Gulf states (particularly Saudi Arabia and Kuwait); loans have come from France and Japan; arms and other help from Egypt; Exocet missiles and Etendard jet fighters from France; and recently missiles from the USSR as well. Iraq's \$3.2 billion phosphate and fertilizer complex (probably a production site for its chemical weapons) is being built by a Belgian firm, with sub-contractors from Pakistan, China, Great Britain, West Germany, and Poland. But as export earnings and foreign reserves have plummeted because of Iraqi inability to ship oil from its Gulf ports in the war zone, development projects and debt repayments have been delayed.

Internally, tight censorship and repression have been enforced as rumors



Paul Mavrides

of unrest and personnel changes in the army and security services abound. Iraq has allowed Turkish troops to enter its territory to attack Kurdish separatist groups, and sabotage against the regime has been carried out by Shi'ite organiza-

established between Iran and the repressive right-wing regimes of Turkey and Pakistan — the old CENTO pact (Central Treaty Organization), now billed as a "Regional Cooperation for Development."

The main beneficiaries of the slaughter have been the Western nations that have been able to get in on the trade.

tions (including the murder of 11 foreign industrial experts in August 1983 and the bombing of intelligence headquarters in November 1983).

Iran, meanwhile, has been receiving weapons for its US-made systems from South Korea, Israel (through intermediaries), and the US (\$160 million worth in recent months). American arms are also usually sold through international arms dealers and other third parties.

Friendly relations have been re-

Iran has major projects under construction with capital from Japan (a petrochemical plant), Italy (a steel plant), and Great Britain (an auto assembly line). It was the main Middle Eastern importer of West German goods in 1983, and officially transacted \$1 billion worth of trade with the United States that same year. The US hopes to regain entry into Iran through the war trade. America's most avid supporters in positions of power in Iran, who stand to benefit from increased trade, advocate

continuing the war as a means of deepening Iran's dependence on the capitalist West.

Meanwhile, what early gains the Iranian revolution had promised have been totally reversed. Land reform and nationalizations have been abrogated; women, religious minorities, and the Kurds have been repressed; and progressives and leftists have been arrested, tortured, and executed.

The West has until now benefited from the stalemate on the battlefields of Iran and Iraq by trading arms and other essential commodities to both countries. But as wars tend to do, this one has gotten out of control.

The US has been content to watch Iran and Iraq batter each other for the last few years, but the possibility of a cutoff of Gulf oil shipments is of real concern to the Reagan administration. Although the US now imports little of its oil from the region, control of Mideast oil is vital to American domination of its Western European and Japanese allies.

In addition there is the administration's long-standing desire to break down the resistance of the Saudi and other Arab governments to a greater US military presence on their territory. This resistance is being eroded by the recent sale of Stinger anti-aircraft missiles and the provision of ultra-sophisticated AWACS for monitoring Gulf air and sea traffic to Saudi Arabia. Reagan is also considering sending extra fuel tanks for the Saudi F-15 fighter jets, and possibly Stinger missiles to Kuwait.

The recent attacks on shipping in the Persian Gulf reveal a growing desperation on both sides. As their populations' willingness to die in a senseless bloodbath melts away, they must resort to other means of conducting the war. This is especially true of Iraq, which lacks the economic and human resources to win a war of attrition.

Iran, on the other hand, cannot permit the Iraqi attacks on its oil terminal on Kharg Island to cut off its most vital source of income. Both regimes continue to cling desperately to the war as the only justification for their existence. Both appear unlikely to survive defeat or surrender. And both seem prepared to risk national suicide.

— Ward Young
LAT staff

— John Foran

Dutch delay deployment

The best laid plans of the US and NATO for deploying cruise and Pershing 2 missiles in Europe may be unraveling. On June 1, the Dutch Cabinet postponed a decision on deployment until November 1, 1985. The move was explained beforehand to Secretary of State George Schultz as a last-ditch effort at saving government unity. If the coalition of Christian Democrats and Peoples Party for Freedom and Democracy fell, Schultz was warned, a Socialist government opposed to any deployment would probably replace it. A State Department official praised the holding action, "I think it is a step in the right direction, and was a difficult, courageous decision for the Cabinet."

In April the Dutch government had tried out a compromise calling for their missiles to be stored in West Germany or the US and placed in the Netherlands during crises. The US quickly popped that trial balloon, and the search for a compromise continued.

Intense pressure has been brought by the Dutch disarmament movement and it remains unclear whether the coalition government can gain legislative sup-

port for the postponement in Parliament. On May 9 during Peace Week, many teachers interrupted their classes at a prearranged time, and a day later, 750,000 union members stopped work for 15 minutes. Trains were also halted to protest the planned deployment of the missiles.

The compromise calls for a final decision on deploying 48 Cruise missiles by November 1, 1985, one year after the US Presidential elections. At that time, the Dutch will agree to deploy the full 48 missiles if no agreement on arms control has been reached by the Soviets and the US and if the Soviets continue to deploy SS-20's in the interim. On the other hand, if the Soviets deploy no more missiles from June, 1984 the Dutch will not deploy. If an arms agreement is reached, the Dutch will station a proportionate share of NATO missiles.

The delay was aimed at pressuring the Soviets to return to the negotiations on limiting medium-range missiles, to the relief of the Reagan administration. The State Department official said the Soviets had several missile sites under construction and it was unlikely the Rus-

sians would curtail their SS-20 deployment on the basis of the Dutch move.

The Dutch delay will in turn affect Belgium, which is also reconsidering its agreement to accept the same number of cruise missiles. In May, Denmark became the first NATO country to withdraw from the financing of the missiles, although it is not among the countries slated for deployment.

On May 3, shortly before the Dutch announcement, Prime Minister Bettino Craxi of Italy proposed a moratorium on missile deployment if the Soviets return to the suspended talks on intermediate-range nuclear weapons. This was immediately denounced by West German Foreign Minister Hans-Dietrich Genscher as "very dangerous." NATO officials argued that a moratorium would revive European opposition to the missiles so much that installation probably could not be resumed even in Britain, Italy, and West Germany, where a total of 66 of the weapons are in place.

European unions reinforce peace movement

Increasingly over the last two years, the labor unions of Western Europe have thrown their considerable political clout behind the disarmament movement. Spurred on by the recession in Europe to confront the established order, they have both come up with alternative economic plans and applied pressure tactics as extreme as national work stoppages in an effort to create a more prosperous, non-nuclear Europe.

The Netherlands

The Dutch week of actions in May protesting the Cruise missiles is a prime example of labor union-peace movement cooperation. One of the main organizers of this "Peace Week," which preceded the government's decision to postpone Cruise missile deployment, was Holland's largest union federation, the FNV. The fifteen-minute general strike it called for May 9, with its three-quarters of a million participants, became a center piece of the week's actions.

Until a year ago, when it issued a position paper entitled for "For Peace and Disarmament," the FNV followed a distinctly hands-off policy with regard to the antiwar movement. The federation's shift on the national level paved the way for peace working groups within local unions that not only helped mobilize for the October and May demonstrations, but sponsored wide-ranging discussions on peace issues.

Furthermore, a caucus known as the "Concerned Group" emerged within the FNV that pushed it to conduct workplace actions as part of a general strategy of noncooperation aimed at stopping the Cruise. The May strike was the first product of that effort. Its contribution to the government's tabling of the missiles should not be underestimated.

West Germany

The Dutch unions are not the first ones to carry out symbolic pro-disarmament work stoppages. Last fall, both the Belgian socialist union federation, the FGVB, and the DGB, West Germany's federation of labor unions, sponsored short nationwide strikes against the Euromissiles.

The DGB's five-minute strike, in which millions took part, was particularly significant because it was the first union-led political strike in West Germany in many years. It was in fact a violation of long-standing DGB policy permitting political strikes only to save West German democracy.

The DGB's evolution on the question of disarmament is similar to that of the Dutch FNV. Two years ago, it refused to have anything to do with anti-Euromissile demonstrations. Allied in the past with the conservative wing of the German Social Democratic Party, it has moved to the left in reaction to the programs of the Christian Democratic Kohl government now in power and the

10% unemployment rate they have helped produce. Equally influential has been the contact that the Greens have made with union activists concerning both the question of disarmament and economic issues.

A series of large conferences over the last year or so, bringing together unionists and representatives of various peace organizations has marked the growing relationship between German unions and peace forces. Although none of these conferences, including the international one the DGB hosted on the eve of the five-minute strike, yielded very much in the way of tangible results, they did serve to win for the peace movement a sympathetic hearing within the unions. This in itself represents an important step forward for the DGB, which in the past has kept enormous blacklists of political dissidents to stop them from getting unionized jobs.

Great Britain

As exemplified by the FNV's organizing slogan, "Jobs not Bombs," the Dutch union federation's main emphasis is actually economic conversion of the armaments industry. Interest in conversion is growing within the DGB, too, which in this respect has lagged behind most other Western European unions, especially those in Great Britain, the country where union-peace movement cooperation is greatest.

Sixteen out of the twenty largest trade unions in Britain are affiliated with the Campaign for Nuclear Disarmament. The umbrella organization European Nuclear Disarmament also has a very

Disarmament is seen as central to resolving the labor unrest shaking Europe this spring.

active trade union group, whose chair, Walt Greendale, is president of the Transport and General Workers Union, Britain's largest union.

Union interest in conversion of the British arms industry to peaceful uses began in the mid-seventies, when the Lucas Aerospace shop stewards council put together the widely-hailed Lucas Plan in an effort to prevent massive layoffs at their company. Although this plan had only limited application due to the militaristic policies of the Thatcher government, it helped spread an appreciation of the economic benefits of converting the arms industry throughout the trade union structure. The Trade Union Congress, Britain's equivalent of the AFL-CIO, has released several major studies espousing conversion and has also come out for unilateral nuclear disarmament in Great Britain.



The national union interest in conversion has still not had much impact in Great Britain. The few local campaigns, e.g. at the Vickers shipyard in Barrows or the Rolls-Royce and British Aerospace aircraft plants, remain isolated cases. They must be classified as distinctly unsuccessful in forcing the corporations and the British government to

following conservative economic policies, such cooperation is unlikely.

In the present atmosphere, the only possibility of the political establishment's taking up conversion is as part of a program to consolidate Western Europe's capital resources in order to create the basis for a renewed continental economy independent of the United States. With high interest rates in the US bleeding Europe of investment capital and the bellicose Reagan administration triggering fears of war, there is certainly a tendency for Western Europe to move in that direction.

Such a maneuver would require that the unions become assistants of a new Euronationalist ruling class. Although this is not inconsistent with unions' customary role, it is hardly what conversion strategists have in mind. It would not guarantee permanent disarmament, anyway.

Red Italy

Then there is the question of whether the unions really represent worker sentiment. If they don't, then involving unions in planning the conversion of the arms industry is not a step toward greater democracy. The unions in that case would not even be very useful in trying to gain worker support for disarmament.

Events this spring in Italy underscore how tenuous the connection is between unions and their base. Italian union support for conversion has been very extensive and very political in recent years. The unions have viewed arms industry conversion as an integral part of an alternative socialist strategy for the economy as well as a way of supporting Third World liberation and non-violent approaches to solving international conflict. They have been somewhat successful in getting more civilian research and investment funded at both the state and plant levels.

However, in the last few months union cohesion has completely broken down and conversion become an irrelevant issue in the face of austerity measures put into effect by a Socialist premier. With the union leadership divided and inactive, it was rank and file shop committees that provided the impetus for the unprecedented labor mobilization and led to the March 29 million-plus demonstration in Rome, the largest in post-war Italy.

The mass explosion in Italy is a sign that the great economic changes brought on by the crisis are breaking down traditional union movement in Western Europe. If the peace movement is to play a major role in ending that crisis and bringing about a revitalized Europe, it will have to find new ways to involve workers in demilitarizing the continent. The question is both an economic one, involving conversion of existing industries, and a political one, concerning how power is wielded in European society.

— Dave Gilden



Teachers against war fever

seriously study the possibility of emphasizing non-defense production.

On the international level, the END trade union group has at least been able to publicize the issues and get together growing numbers of trade unionists from various countries to discuss them. The latest step in this continuing process was the "Action for Jobs for Peace" conference that took place in West Germany this winter to discuss what concerted "action" union members might take.

Arms conversion

The reason that conversion strikes a resonant chord with pro-disarmament trade unionists is that it fits in handily with leftist proposals for ending the current economic crisis in Europe. Basically, the argument runs that Western Europe, with its 11% unemployment rate, needs more spending on arms like a hole in the head. Such expenditures create comparatively few jobs, militarize society, and divert resources that could be used to maintain or even increase workers' standard of living.

Rejecting the austerity programs that Western European countries are currently following, conversion advocates want governments, corporations, and workers to jointly formulate plans for restructuring the economy. They hope that by transferring the money now tied up in armaments to related, but more socially useful (and job-creating) areas, a more stable, competitive economy will result.

In this broad view, conversion combines elements of workers' control and social egalitarianism. And, rather than being a side issue, disarmament is seen as central to resolving the tremendous labor unrest that is shaking Britain, France, West Germany, and Italy this spring. Massive strikes, demonstrations and even riots have erupted in these three countries to protest moves to end the crisis by forcing workers to accept mass layoffs and pay cuts.

But conversion is cooptable

The problem with the conversion approach, as the futile British experience shows, is that it requires capitalist and state cooperation to carry out. With the ruling parties all over Western Europe

Chemical and biological war

(continued from page 1)

In seconds they were clutching their throats, gasping for air, as the corrosive gas stripped away the lining of their bronchial tubes and lungs.

Some tried to escape the gas by burying their faces in the dirt; others tried to run. But exertion only intensified the poisoning. As the waves of gas washed over them, the struggling men turned blue from the effort of trying to breathe. Some coughed so violently that they ruptured their lungs. Helpless, each man slowly drowned as his inflamed lungs filled with fluid. As many as five thousand are believed to have died within a few hours on that April afternoon.

Many of the survivors, less severely poisoned, suffered even more agonizing deaths. One officer wrote,

"There was no difficulty in finding [the gassed men]. . . . The noise of the poor devils trying to get their breath was sufficient direction. Twenty of the worst cases were on mattresses, all more or less in a sitting posture, propped against the walls. Faces, arms, hands were a shiny gray black. With mouths open and lead-glazed eyes, they were all swaying backwards and forwards trying to get their breath, struggling, struggling for life. There was nothing that could be done. . . . The gas fills up the lungs and bronchial tubes with froth, which finally suffocates the victim. It is like slow drowning, sometimes taking two days."

The first German chlorine attack could have been very successful militarily, as it created widespread panic among the Allied troops and set off a mad scramble toward the rear. The Germans had issued primitive masks to their troops and were able to invade areas where the gas persisted. But German commanders had not expected the gas attack to work, and were unprepared to exploit the breach in the Allied defenses. They dug in for the night, enabling the Allies to bring in reinforcements.

Over the next weeks and months, Allied gas masks were hastily improvised and issued, and troops were trained in their use. German chlorine attacks no longer caused widespread panic. The British — although possessing a far smaller chemical industry than the Germans — were determined to get even,

and began producing their own chlorine for offensive use. Frenzied research began at laboratories in Britain and other Allied countries, investigating thousands of chemicals in a drive to beat the Germans in the development of better war poisons. This chemical arms race was to persist for the rest of the war, with the Germans introducing each new and deadlier substance, and the Allies following close behind.

Better living through chemistry

The next round began on December 19, when the Germans first used phosgene, another byproduct of that nation's massive chemical and dye industry. Phosgene greatly deepened the fear of gas. It was roughly 20 times deadlier than chlorine, and unlike

British. It consisted of a battery of dozens of launching tubes spaced along the front and fired simultaneously by an electric charge. Each tube contained a drum filled with 30 pounds of liquid phosgene. As the drums went hurtling into the enemy lines, they were all burst open by explosives, instantly setting up a lethal cloud of gas. Livens, who passionately hated the Germans, calculated that "the cost of killing Germans would be reduced to only sixteen shillings apiece" if his invention were mass-produced.

Soon, gas-filled artillery shells appeared. They made possible the use of the most horrendous weapon yet: mustard gas.

Mustard gas made its debut on a warm summer night in 1917, again at

By the end of WWI, Europe had been drenched with over 100,000 tons of toxic chemicals.

chlorine was nearly colorless and odorless, providing little warning of its presence.

A victim who had inhaled a lethal dose of phosgene often felt no immediate effects except a quickly passing irritation of the eyes and throat. He might feel fine, or even mildly euphoric, for the next two days. But then his lungs filled with fluid and the slightest exertion could cause collapse. The "drowning period" began. Victims were known to cough up a half gallon of thin, yellowish fluid every hour; it could take forty-eight hours to die.

The Allies soon started using phosgene, too. The insidiousness of the gas can be appreciated by the fact that 57 of the specially trained British chemical warfare troops were killed by their own phosgene in one battle alone.

As with nuclear arms forty years later, there was also a rush to develop new and more effective means to "deliver" poison gas to its intended victims. The Livens Projector, the forerunner of the modern cluster bomb, was one such device developed by the

Ypres, as the Allies were bombarded with hundreds of chemical shells. They contained not the gases the soldiers were used to, but a brown liquid that looked like sherry and smelled like mustard. Feeling no immediate effects, many didn't bother to put on their gas masks and quickly went back to sleep.

In the early morning, they woke up with intolerable pain in their eyes and started to vomit uncontrollably. Moist red patches on the skin began to blister and swell, growing into massive yellow blisters up to a foot long. The vapor easily penetrated clothing, attacking skin wherever it was most sensitive: at the bend of the elbow, the back of the knee, the neck, the genitals. Severely exposed victims could spend three or more agonized months recovering from these chemical burns, which would often become infected and were especially slow to heal. Doctors noted that healing skin often would suddenly break out in a new crop of blisters, or that an area of skin believed uncontaminated would blister for the first time a week after the exposure.

Those who had breathed much of the vapor were in even worse shape, as the chemical slowly destroyed their lungs and internal organs. Death could take as long as several weeks, and the health of heavily exposed survivors was so seriously damaged that many died within a few years.

The Germans had built up enormous stores of mustard; within ten days of its introduction they had pounded Allied positions with over a million shells containing 2500 tons of the substance. Mustard, in use only for the last 18 months of the war, claimed 125,000 British casualties, 70% of total British gas casualties for the entire war.

Mustard gas opened up whole new possibilities to military strategists. An area that had been contaminated by mustard remained dangerous for long periods; the liquid collected in shell craters, polluted water, and stayed in the soil. It could thus be used to "seal off" areas of a battlefield and greatly reduce the effectiveness of enemy forces by forcing them to wear protective clothing and gas masks continuously and to spend hours decontaminating their equipment.

Death rides the rails

Although the British attempted to rush mustard gas into production — at the cost of many casualties among civilian plant workers — they weren't very successful until the war was nearly over. Instead, they launched massive gas attacks at night using huge phosgene cylinders mounted on the backs of railway engines. When the valves were opened, a narrow, concentrated cloud would drift into the enemy positions.

As the clouds drifted into towns miles behind the German lines, they created great panic. Alarm bells were rung, and troops and civilians, all clutch-

ing respirators, rushed to the top floors of the houses. The clouds swirled by below, killing all the flowers and vegetables in the gardens. The Germans were reportedly so anxious to conceal the casualties of these attacks that they conducted all burials at night.

By the end of the war, Europe had been drenched with over 100,000 tons of toxic chemicals. Over 1.3 million soldiers, as well as many civilians, had been wounded by gas; nearly 100,000 had died. Of all the combatants, the Soviet Union had suffered most, sustaining over a half million casualties.

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Onward through the fog

But revulsion to gas warfare was not universal. At Porton Down in Britain, Edgewood Arsenal in the United States, and similar facilities in other countries, a huge scientific-industrial establishment had been created during the war. At Edgewood, nearly 2000 American scientists and technicians were investigating 4000 poisonous substances by the end of the war. The arsenal had cost \$40 million to build; it had over 200 manufacturing buildings capable of producing 200,000 chemical bombs and



fare: the other deadly cloud



shells per day. No single scientific project approached this scale until the establishment of the Manhattan project which built the atomic bomb. Sharing the Edgewood Arsenal's interest in its own continuation were, of course, the major industrial firms which supplied it with materials.

As with the atomic-industrial complex 25 years later, the powerful chemical warfare establishment created by World War I didn't just fade away when its military rationale disappeared. It, too, became an influential force in setting government policy, through lobbying and orchestrating "expert" and popular opinion to support continued CBW development.

The push to refurbish chemical warfare's image relied on two main arguments: that it was actually more "humane" than conventional warfare (since a only a small percentage of gassed men died outright) and that the development of offensive chemical weapons was necessary in order to prepare defenses against whatever "the enemy" might be brewing up. Like the atomic establishment which followed it, the chemical warriors didn't hesitate to suppress inconvenient facts. In England, for instance, researchers from Porton Down conducted secret followup studies of gassed men which found many of them to be permanent invalids — and to be getting sicker rather than recovering as time went on. Publically, however, Porton Down officials denounced the press for "scare mongering" about the long-term effects of gas poisoning, and it

participated in setting harsh standards for granting war pensions to gassed men in order to minimize the number officially acknowledged as disabled.

Virtually every major government quietly established or expanded chemical warfare research facilities in the early

1920's. In a parallel to the nuclear arms race which was to follow decades later, war-weary publics were appeased with an arms control treaty — the 1925 Geneva Protocol — which purported to ban chemical warfare. But many of the countries that ratified it reserved the right to reply in kind to chemical attack.

In the United States, the Chemical Warfare Service enlisted the American Chemical Society and several veterans' organizations in an effective lobby against ratification, claiming that banning CW meant "the abandonment of humane methods for the old horrors of battle." By 1930, France, Italy, the Soviet Union, Germany, and Britain had all ratified the Treaty; the US and Japan were the only holdouts. Neither country was to ratify the treaty until 40 years later.

Gas for every occasion

Treaty or not, the chemical arsenals continued to grow in size and sophistication — and they continued to be used. As early as 1919, the British used the "M device," which emitted an arsenic-based smoke that caused excruciating pain, when they intervened against the Bolsheviks at Archangel. They also supplied gas shells to Russian counter-revolutionary forces. Later the same year, the British apparently used phosgene and mustard gas in Afghanistan against rebellious tribespeople; there are records that the gas was shipped, but no positive proof that it was used. In 1925, the French and Spanish used poison gas in Morocco.

powerful that they made mustard gas seem like a mere annoyance.

Near the end of 1936, Dr. Gerhard Schrader was investigating a series of organic phosphorus compounds which he thought might be effective as insecticides. Effective they were. But he soon discovered that the smallest drop of the substance spilled on the laboratory bench would cause his pupils to contract to pinpoints, and he found it hard to breathe. After a few days of this, he and his assistant were forced to take several weeks off to recover. They were lucky to survive.

Schrader had discovered the first, and least deadly, of the nerve gases, a compound later named tabun. A year later, he discovered a related chemical, sarin, which was ten times more toxic still. The Nazis lost no time in putting the new discoveries into production. They built a huge factory, a mile and a half long and half a mile wide, capable of producing 3000 tons of nerve gas a month, which was loaded into shells and carried on camouflaged rail to a huge underground arsenal. The plant employed 3000 workers, many of whom were poisoned despite extraordinary precautions such as enclosing the entire plant in double glass walls and providing workers with triple-layer protective suits. At least ten died despite immediate medical treatment.

Nerve gas kills by interfering with an enzyme which "turns off" nerve impulses in the body. The tiniest droplet, inhaled or absorbed through the skin, causes twitching, jerking, vomiting,

If Hitler had used his massive stocks of nerve gases, he might well have won.

All apparently found the results exemplary. Here was a weapon which had most devastating effects on poorly protected and scientifically unsophisticated insurgents, the perfect tool for imperial powers with restless colonies to keep in line.

As World War II approached, the use of chemical warfare rose to major proportions. From 1937 onward, the Japanese used mustard gas extensively in the war against China; as many as a third of all Japanese munitions reportedly were filled with chemicals. Italy, despite signing the Geneva protocol, used its invasion of Ethiopia as the proving ground for new techniques of spraying mustard gas from airplanes. Used indiscriminately against unprotected troops and civilians alike, the deadly rain of mustard gas exacted an appalling toll of suffering.

In remilitarized Germany, preparing for war, came the most ominous development of all: the accidental discovery of a family of poisons so

defecation, convulsions, death. It is a spectacular and rapid killer, taking perhaps ten or fifteen minutes. Victims who survive may suffer permanent neurological damage.

Nerve gas was probably tested on concentration camp prisoners by the Nazis, but it — and other gases — were never actually used in World War II. Explanations for this vary, from the idea that Hitler wrongly thought the Allies also had nerve gases to the belief that Hitler had a personal aversion to chemical warfare because he was gassed in World War I and spent months recovering. For their part, the Allies never found an occasion when using gas would convey a clear military advantage — although they did make contingency plans to drench German cities with gas or deadly bacteria. In the end, incendiary bombs — and the atomic bomb — were the weapons the Allies chose to use against civilian populations.

But the fact remains that if Hitler
(continued on page 10)



The Battle of Somme, July, 1916. Machine gunners were frequently issued oxygen cylinders to enable them to withstand a long gas attack and mow down the first waves of the enemy's assault troops.

CBW: the other deadly cloud

(continued from page 9)

had chosen to use his vast stocks of nerve gases, he might well have won the war. This lesson was not lost on the conquering Soviets and Americans, who vied to capture German nerve gas equipment and knowhow.

Germs get drafted

The late 1940's and 1950's saw not only a fascination with nerve gas, and the building of large production complexes in the US and USSR, but also the first major activity in biological warfare. Some of the world's deadliest organisms — anthrax, plague, cholera, typhus, typhoid, botulism, gangrene — were recruited to the cause of war. Experimentation abounded, most infamously in Japan where prisoners of war were infected with shrapnel from germ bombs and then "sacrificed" at intervals to study the progress of the diseases.

Although Western researchers used animals as subjects rather than humans, their ultimate plans were no less horrific, involving spreading deadly epidemics through whole populations — a sort of "public health in reverse." And US officials were so anxious to get their hands on the data from the gruesome Japanese experiments that they made a deal to grant the Japanese researchers amnesty and protect them from publicity in exchange for their results — a deal that was not exposed for thirty years. The Soviets reportedly conducted similar experiments of their own.

At the end of World War II, the US was employing nearly 4000 people at four top-secret germ warfare installations. As the war concluded, this research was centralized at Camp Detrick, a former National Guard airfield an hour's drive from Washington, DC. A similar facility was set up in Britain near the existing chemical warfare center at Porton Down.

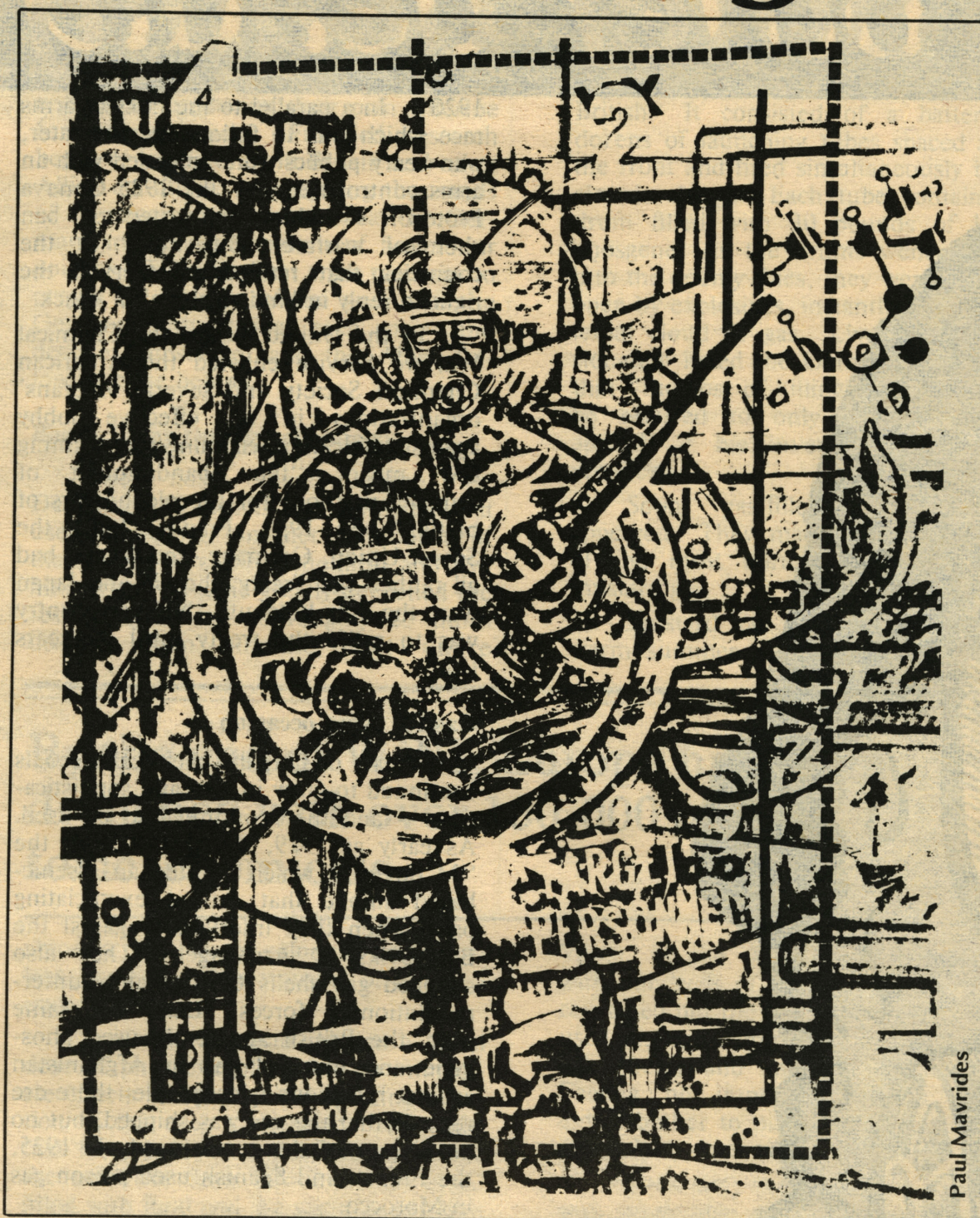
The advocates of biological warfare were faced with a problem. Unlike gas, biological weapons had never been tested under field conditions, and no one knew how effective they would really be. So test they did: light bulbs filled with "harmless" germs were tossed on the tracks of the New York subway; whole cities — including San Francisco, Minneapolis, and Winnipeg, Canada, — were sprayed with bugs or "tracer" chemicals; and actual biological weapons were even tested on animals tethered on islands. The researchers came up with organisms to destroy not only people but food crops and animals as well. They concocted plans to breed mosquitoes and fleas by the hundreds of millions, the better to transmit yellow fever or plague.

It is not clear whether the fruits of most of this ingenuity were ever used, although it appears that the anti-crop weapons were employed in World War II, when the German potato crop and the Japanese rice crop were hit with mysterious plagues following aerial attacks. Reports from Cuba and Korea, some confirmed by international observers, suggest that the US used similar weapons against agriculture in those countries.

In 1968, nerve gas was accidentally released following a test at the Dugway proving ground in Utah, killing thousands of sheep grazing twenty miles away. This accident — which the Army at first refused to admit — caused a major furor and focussed unwelcome public attention on the huge American CBW arsenal. The CBW establishment realized that it had to sacrifice *something* to reassure the public of the government's peaceful intentions, and that something was the biological warfare program.

In late 1979, President Nixon announced that the US would abandon biological warfare, and in 1972 the US and USSR signed the Biological Weapons convention, a sweeping agreement which resulted (at least officially) in the destruction of all existing biological weapons. Eighty other countries soon followed suit.

But this seeming triumph of diplomacy covered up the fact that biological weapons had been set aside not for moral reasons, but because they were too hard to control and limit to their intended victims. They were also



too easy to make; brewing germs was a process nearly as easy as brewing beer. The US and USSR probably thought it just as well that a weapon which their smallest opponents could make was declared officially off limits.

So the TV cameras rolled as batches of deadly germs were turned into harmless fertilizer. And many nations that had so piously sworn off germs continued to stockpile — and to use — chemical weapons.

Without chemicals, life itself. . .

As with the atomic bomb, rationality and common sense rarely interfered with cranking out ever more nerve gas. In 20 years, the US stockpiled over four million pounds of sarin in one place, the Rocky Mountain Arsenal. It was stored, in bombs and shells, just off the end of the Denver airport, one of America's busiest. Eight million pounds of VX, an even deadlier nerve agent which could contaminate an area for weeks, were also produced. As with nuclear weapons, the total size of the US nerve gas stockpile is classified — but has been estimated at as much as 80 million pounds.

The Pentagon had planned to distribute this vast hoard of poison to its bases overseas, but met fierce resistance from those bases' neighbors. Even at home, several well-publicized accidents had given nerve gas a bad name. The fix for this problem was to propose still another generation of gas weapons: the binaries.

The binary concept involved filling shells or bombs with two less toxic chemicals that would be mixed to form nerve gas when the weapon was fired. Due to the inefficiency of this chemical reaction, such weapons are less effective militarily — but that was a price the Pentagon was willing to pay for public acceptance of nerve gas deployment. Besides, the program would mean a whole new infusion of money for the gas establishment, which produced the last of its massive stockpile in 1968. The binary scheme continues to pop up every few years (most recently in a proposal by Reagan) but Congress has yet to approve full-scale production funding.

Another public relations ploy was to hide all the nerve gas behind flashy new research on psychochemicals which would incapacitate an enemy but not permanently harm him. This "war without death," was the chemical equivalent of the "atoms for peace" program, which made the atomic weapons complex look less militaristic. Disorienting weapons, such as the gas

BZ, were in fact produced, but their effects proved too unpredictable to be of much use militarily. After much bizarre research by the military and CIA, including some on unsuspecting subjects who were dosed with drugs, the program was quietly shelved.

When the US got involved in Vietnam, the chemical warriors weren't about to throw away all this careful public relations by using nerve gas. But the US did launch a huge chemical warfare operation there, drenching Vietnam with over 100 million pounds of herbicides intended to destroy forest cover and food crops. The herbicides were contaminated with hundreds of pounds of dioxin, one of the deadliest chemical compounds known. The tragic legacy of this massive poisoning will be felt for decades.

The US also used "nonlethal" gases in Vietnam, including arsenic-based ones and CS, to force opposition soldiers into the open to face bombs and bullets. These irritating gases, publically referred to under the benign label "tear gas," were often applied in massive doses — which could prove fatal — from aircraft or portable power sprayers.

The US wasn't alone. In the sixties, Egypt used poison gas in Yemen. The seventies saw its use by Vietnam against the Chinese and rebel tribespeople and by the Soviets against rebels in Afghanistan. Both nerve and mustard gases are currently being used by Iraq in its war with Iran, and the Iraqis are apparently building five large plants to

produce poison gases in large quantities.

Some recent gas attacks apparently involve a new generation of poisons based on fungal toxins. With the advent of genetic engineering, other new weapons have become possible, such as diseases tailored to infect specific ethnic groups or everyone who hasn't been covertly immunized.

Despite the biological warfare ban, work on anti-BW vaccines is accelerating in the US and elsewhere, justified — as always — by the claim it is defensive. The problem is difficult: there may indeed be a need for defenses against a weapon so easily produced, but the development of such defenses removes the major barrier to the use of BW, the fear of retaliation.

Biological warfare is not the only area of CBW being revived in the current Cold War nostalgia. President Reagan is making another attempt to sell Congress on binary nerve gas weapons as part of his huge arms buildup. The current sales strategy is to claim that their production is a "bargaining chip" designed not for use, but to pressure the Russians into signing the chemical arms treaty the US is proposing. This treaty, however, is designed to be unacceptable to the Soviets, since its inspection provisions are heavily biased against them.

This con game, where Congress gives the administration real weapons in exchange for a bogus treaty proposal, was last successfully used to get the MX missile.

A plague on all our houses

It would be easy to prescribe for CBW the same solution that many hold for the Bomb: freeze the arsenals and eventually destroy them. Unfortunately, the weapons of chemistry and biology are much easier to make than those of nuclear physics. If all stockpiles were destroyed tomorrow, they would not take long to rebuild. Laboratories that produce vaccines to prevent diseases can just as easily make germs for biological weapons. Plants used to produce industrial chemicals and pesticides can regrettably often be modified to produce the fatal clouds of war, perhaps with no one the wiser.

The history of CBW is full of hypocrisy and deceit — governments which sign treaties they intend to violate, doctors figuring out how to spread disease, war criminals who go free in exchange for the details of their crimes, propagandists who make the public forget about the last war in preparation for the next. When the political process limits us to discussions of "catching up" to the Russians in gas, we must remember, and remind others, where that thinking has led.

In any future chemical or biological war, it is unprotected civilians who will suffer and die in the greatest numbers. As with the Bomb, we are not at fault for the madness of the world's rulers. But we have allowed them to prepare our doom, and to twist every innovation of science into a new instrument of terror. We continue to let them decide on what terms we shall live, in what manner we shall die.

— Bob Van Scoy
IAT staff

Gas! Gas! Quick, boys — an ecstasy of fumbling,
Fitting the clumsy helmets just in time,
But someone still was yelling out and stumbling,
And flound'ring like a man in fire or lime. . .
Dim, through the misty panes and thick green light,
As under a green sea, I saw him drowning.
In all my dreams, before my helpless-sight,
He plunges at me, guttering, choking, drowning.

If in some smothering dream you too could pace
Behind the wagon that we flung him in,
And watch the white eyes writhing in his face,
His hanging face, like a devil's sick of sin;
If you could hear, at every jolt, the blood
Come gargling from the froth-corrupted lungs,
Obscene as cancer, bitter as the cud
Of vile incurable sores on innocent tongues, —
My friend, you would not tell with such high zest
To children ardent for some desperate glory,
The old Lie: *Dulce et decorum est*
Pro patria mori.

— Wilfred Owen

UC Berkeley's germ warfare connection

(continued from page 1)

the lab failed to alert public health authorities even after an epidemic of Serratia broke out. (See sidebar.)

In 1950 the laboratory moved to the Oakland Naval Supply Center, just south of the Oakland Outer Harbor near the Bay Bridge Toll Plaza, where it now operates in greatly expanded quarters. In 1957 its sponsor also changed — from the Department of Bacteriology to UC's School of Public Health. This change apparently was precipitated by a heated controversy involving faculty concerns that the lab's goals contradicted UC's overall philosophy.

That year witnessed a stormy confrontation when NBL's new director was nominated as a full professor in the Bacteriology Department. Stanier and others fought the appointment while fending off charges of "disloyalty" for their general opposition to the lab's BW work. The episode ended in the separation of the lab directorship from the departmental post and ultimately the lab's divorce from the Bacteriology Department altogether.

CBW in a civilized age

Recent years have been more tranquil for NBL. The conflicts in the Department of Bacteriology are a distant memory — for those who remember them at all. The lab's top researchers all hold academic posts at the School of Public Health, and many professors from other campus departments and across the UC system use the NBL's well endowed facilities. A dozen UC Berkeley graduate students are supported by lab projects. Many of the lab's staff of 85 have shifted their work to recombinant DNA and other advanced techniques.

The dean of the School of Public Health approves all NBL research proposals before they go to their respective funding sources. In most cases, this means the Navy, which provides the vast majority of the lab's \$4 to \$5 million (fiscal year 1983-4) budget, according to Associate Dean Nicholas Parlette. This represents a doubling of the lab's budget since 1982.

In addition to rather mundane efforts to reduce the build-up of marine



life on ship bottoms, the lab specializes in developing vaccines and in basic research into the genetic make-up and other properties of potential BW agents. It also studies techniques to rapidly identify and detect microorganisms and methods to disseminate them.

A bug gap?

This is where the difficulty of distinguishing "offensive" from "defensive" research takes on greatest significance. Developing vaccines that can protect troops and civilians from BW agents eliminates the main deterrent to their use — fear of retaliation.

According to Harvard Medical School Professor Richard Goldstein, "The key is vaccination . . . [with the latest biological techniques] you can make a vaccine against anything, and if you have a vaccine, it makes use of these weapons more feasible." When work on both the detection of BW agents and their dissemination is added to vaccine development, ostensibly inno-

uous efforts take on other implications. In fact, all these areas are being investigated by the NLB and other military labs.

UC Santa Cruz Chancellor Robert Sinsheimer, a noted biophysicist, questions whether defense against BW is even a credible concept. He says that recombinant DNA techniques can be used to create a nearly limitless set of variations or modifications on BW agents.

Therefore, maintaining a credible defense may call for a similarly limitless series of vaccines. This could lead to another kind of arms race: genetically modified BW agents would be created in order to develop vaccines against them — for defense against the possibility that Soviet scientists could do the same.

According to Associate Dean Parlette, the School of Public Health sees NBL work as exclusively oriented toward the prevention of disease. "I think the research is undertaken for its scientific merit," said Parlette. "The Navy provides most of the funding, but I don't think this means they are dictating what

ing in on these resources. It's buying top biochemical know-how at UC San Francisco and Hayward's Bio-Response, Inc. to develop antidotes to nerve gas.

No treaty prohibits development or production of chemical weapons. A reliable nerve gas antidote, like the fail-safe vaccines against BW which the NBL hopes to discover, could be considered defensive in purpose. But like BW vaccines and defense against nuclear weapons, it would increase the temptation of a "first strike."

Many local scientists at work on these studies believe that preparing an effective defense against CBW (chemical-biological warfare) is the government's solemn responsibility. But even if the need for such a defense is accepted, who is best equipped to oversee defensive CBW research in the biological sciences?

Only extensive public debate can answer such questions. Unfortunately, that debate is simply not happening. Both the media and Congress are all but ignoring the Pentagon's biological research.

CBW in the Bay Area

During eight days in September 1950, two mine sweepers steamed back and forth just outside the Golden Gate Bridge. Their top secret mission: saturate San Francisco and the East Bay with bacteria. This was not the plot of demented terrorists — it was a carefully planned exercise of the United States Army.

Two supposedly harmless microorganisms, *Bacillus globigii* and *Serratia marcescens*, were released in vast clouds. The purpose of releasing these "simulants" was to mimic the behavior of biological weapons (BW). The tests provided key knowledge about the dissemination of real biological warfare agents.

This experiment and others like it across the country remained classified until 1976, when the military's broad-ranging program of using US cities for BW experiments was uncovered and greeted with public outrage.

Roger Stanier, a former University of California professor, wrote in the 1980 *Annual Review of Microbiology*, "Within a week of the air-borne dispersal, a mini-epidemic of *Serratia marcescens* infections . . . broke out at the old Stanford Hospital. So exceptional were *Serratia* infections at the time, that a team of medical investigators published an article about it in a journal of international standing." One person died.

The sordid affair, for which even governmental officials have since expressed public regret, is only one chapter in a long history of chemical and biological weapons (CBW) research in the Bay Area. Secret research, as well as unclassified, ostensibly innocuous studies here, have played a significant role

in the development and direction of the US CBW arsenal.

While the military worked on its BW program, the Central Intelligence Agency found the Bay Area ideal for dabbling in chemical mind-control espionage.

Between 1955 and 1965, the CIA set up "safe houses" in both San Francisco and Marin County. According to espionage watchdog John Marks, whose descriptions are drawn from CIA files obtained under the Freedom of Information Act, these sites were used to test everything from powerful psychochemicals to the effects of harassment agents such as stink bombs, itch and sneeze powders, and diarrhea inducers.

With the tacit cooperation of local police, unwitting subjects were lured off the streets by prostitutes, who drugged their clients while CIA agents watched from the next room through one-way mirrors.

According to CIA documents released to Marks, the CIA used hundreds of prisoners at the California Medical Facility (a prison hospital at nearby Vacaville) as "volunteers" in a drug testing program aimed at "behavior control, behavior anomaly production and counter-measures for opposition application of similar substances." In other words, the CIA intended to use covert chemical manipulation to force cooperation when it could not be bought or obtained by persuasion or threats.

These experiments, which took place from 1953 until at least 1967, involved heroin, morphine, amphetamines, and other dangerous drugs.

— Charles Piller

"If you have a vaccine, use of these weapons is more feasible."

results are coming out." Any research results published in open professional journals can be used for good or bad purposes, he added. As *It's About Times* went to press, NBL director David Kingsbury was unavailable for comment.

Without question, much of NBL's work has legitimate civilian applications. But like any research, work at the lab is subject to both subtle and obvious manipulation by its funding sources. When the funding source is the military, the direction of research can come to depend on meeting military goals.

Regardless of the good intentions of individual researchers, scientific findings can be integrated into the work of strictly military labs — where they can be used for purposes their originators never intended. These military facilities are far less open than a university-administered operation.

The big picture

The NBL's growing sophistication is only one indication of the Bay Area's ascendancy in the last decade as a major center of modern biology. Gene-splicing itself was developed by UC San Francisco and Stanford scientists a decade ago. Adding UC Berkeley, the area boasts three of academia's biotechnology giants.

The burgeoning recombinant DNA industry could call the Bay Area its home base. Among the dozens of local companies are two of the biggest in the business — South San Francisco's Genentech and Emeryville's Cetus.

Not surprisingly, the Army is cash-

See no evil . . .

Part of the problem is the lack of effective oversight of the military's work in biotechnology. A February decision of the National Institute of Health Recombinant DNA Advisory Committee (RAC) dramatically highlights the problem. RAC approved a military study to clone the gene for Shiga toxin — a substance that causes a form of dysentery. The purpose of the experiment, said the military, was to create a vaccine.

In its approval, RAC overrode protests from, among others, Paul Warnke, former head of the Arms Control and Disarmament Agency. Warnke pointed out that the experiment could create a biological weapon.

Jonathan King, an internationally known microbiologist at MIT, told the *San Jose Mercury News* in April, "I don't think you can ask a committee that's constituted on narrow technical grounds around safety to deal with questions of policy . . . [RAC] is trying to help the technology along. They don't want questions raised in public. They don't want people to say, 'Gee, this technology could be used for war.'"

Sinsheimer takes it even a step further. "I would prefer the military stayed out of this area," he told the *Mercury News*. "The more the military learns about it, the more it may increase their temptation to use it for other than defensive purposes."

— Charles Piller

The Minnesota Women's Peace Camp

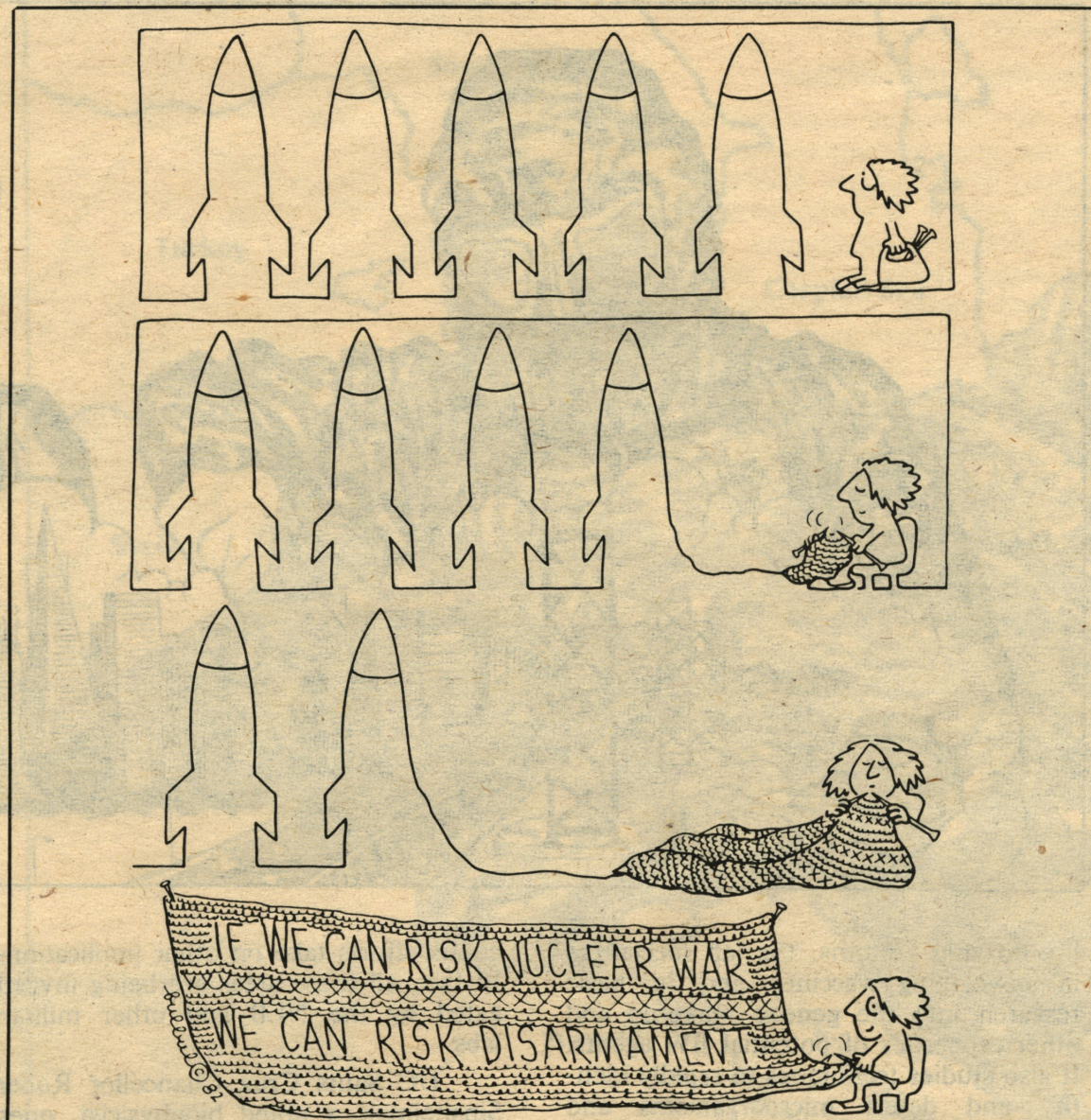
Reflections on leaving home and peace camping

"Or maybe you'd prefer to see the Peace Camp first?" *Maybe?* To understand the rush that simple invitation inspired, you'd have to know the usual routine: I land in a strange city to give a lecture or be interviewed for an academic job and the person who meets me at the airport is supposed to show me around the city. I'm getting good at identifying feminists, college professors, and feminist professors as I step past the arrival gate. And I've taken the same tour of a lot of different cities.

This afternoon, it's Naomi who's greeted me and laid out our itinerary for this free Sunday before my two-day interview. I'm getting a customized tour of both Twin Cities.

Not far from the airport, we take a right onto the freeway and there's a wedge of land at the angle of two roads: posters, balloons, a couple of no-nonsense tents, perhaps 50 women moving purposefully about. The nearest banner reads: MEN HAVE ALWAYS LEFT HOME TO MAKE WAR — NOW WOMEN LEAVE HOME TO MAKE PEACE. It occurs to Naomi that this is the "sight" she should show me first. We make a swift U-turn, drive back, and park. For once, the tour is not "business as usual."

No business as usual is, in fact, an important aspect of what's going on here. The women are camped on Native American land — tribal permission granted — at the gates of Sperry Rand. But in the afternoon's speeches, Sperry, Honeywell, and Control Data share equal "honors" as military producers; one of the chief functions of the women's presence here is as a "witness"



it? And does the imperative, if there is one, fall differently on women than on men?

The introduction to this afternoon's program answer's one of my questions and dispels a bit of my guilt. There is recognition that most of us are not able

All of this makes me slightly uneasy, but I admonish myself not to quibble over words. Besides, this woman and her sisters spent the winter outdoors in Minnesota, while I was under a roof in California.

There is a guest speaker, one of the Ploughshares 8. She is a mother and grandmother many times over, and these facts are presented as intrinsic to her antiwar commitment. It's one answer to the question of why an all-women's peace camp.

My son has been protesting for a year now that in San Francisco we have an annual demonstration on Mother's Day, but not on Fathers Day: "Don't they think fathers care about peace too?" I've patiently explained that men in the peace movement — of whom there are a great many — are not organized as males, much less as fathers, whereas women have long felt a particular involvement in the issue based on our role as bearers and nurturers of life.

This vision of women as peacemakers is heightened by feminist awareness

If she's simply saying that actions speak louder than words, I agree, as both activist and poet; but if she's claiming that this action has other than metaphorical value, then she's lost me, as both poet and activist. When you beat up on a warhead, you are *making a statement* about what ought to happen to nuclear weapons. Making that statement is an important step in making it happen, but it's not the same thing as making it happen. If we accept the symbol as an effective reality, we will all be incinerated in a posture of blissful moral righteousness.

Naomi and I have to leave the Peace Camp after hearing a pair of excellent folksingers in order to fit in the tour. In the almost-spring sunlight, the Twin Cities look attractive and prosperous. Minneapolis and St. Paul have made a successful transition from "smokestack America" to high tech production. The local economy sits on a foundation of Honeywell, Sperry, Control Data, and they, in turn, rely heavily on military contracts.

The peace movement has been eloquent in pointing out that prosperity is meaningless if the planet itself doesn't survive. So far, we've been much less successful in proposing alternatives to war production for the individuals and communities that depend on it. What echoes from the Peace Camp and the Honeywell blockades are resonating among the working people of the Twin Cities?

Certain of those echoes come back to me for the next couple of days. At a house I visit later on Sunday, there's a beautifully calligraphed chart on the refrigerator door, listing the key signs of Spring, not just things like the first crocus or robin, but the first time the next-door neighbor hangs his wash outside. They've meticulously recorded the date each of these milestones occurred for the past three years. In 1983, I read, the last snow melted under the porch on April 10. I remember the women camping out in the cold for peace in a place where snow still rims the yard and huddles under the porch well into April.

On Monday, my friend Richard comes to hear my talk about women's literature and women's literacy. A Shakespearean, he tells me he's decided I was right, four years ago, about *The Taming of A Shrew*. "I guess you *can't* read it as anything but a sexist play," he now agrees. "I'll never forget how you said,

The women's presence here is testimony that research and development for the war machine must no longer be carried out without an immediate, visible challenge.

for peace, testimony that research and development for the war machine must no longer be carried out without an immediate, visible challenge.

The idea of a living witness is the Peace Camp's central theme, accompanied by a range of community education efforts, from workshops and discussions at the camp itself to leafletting homebound Sperry workers and other commuters at rush hour on the freeway. It is no longer possible to pretend that Sperry is just another high tech plant and hasn't been for the past six months.

That's the first thing I learn as I circulate, picking up literature, talking to women from the camp and others who are visiting: today is the six-month anniversary of the Camp's establishment. The immediate response of anyone who hears you're going to Minneapolis is, "It gets really cold there!" Six months ago was the first of October. That means the women have endured the long Minnesota winter on this bare, open land by the freeway with only the two big tents for shelter.

As we settle down on the yellowed grass for the anniversary program, I remember a speech I heard last year in Golden Gate Park: "The women of Greenham Common are not camped out there, sleeping rough, for the fun of it, but because they are convinced that it is the best way to live." And that was the *English* winter — notoriously cold and wet, to be sure, but a far cry from Minnesota.

A souvenir child's tee shirt — MINNESOTA WOMEN'S CAMP FOR PEACE AND JUSTICE — crumpled on my lap, I consider that proposition. Is it the best way to live? Because it bears witness to the intensity of moral conviction? Or because it helps to create a new model of human community? Either way, is there a categorical imperative at work: are they saying it's the best way for all of us to live? Do I agree and what am I going to do about

to move into the Camp's Long House and its adjoining teepee, that women do have jobs and houses and children.

People visiting for the occasion are encouraged to fit the Peace Camp into their daily lives. Help is needed, for example, at the day's-end leafletting. If you get home from work and don't feel like cooking, bring your kids out here for a show of strength at rush hour and stay for dinner from the common pot.

I am impressed and even moved at this absence of self-righteousness. There's none of that condescension full-time peace people can display to those caught up in a more daily kind of struggle for survival. Yet my other questions remain.

The anniversary ceremony was to begin with a Ritual, but the women who run Rituals haven't arrived. We'll have to do the opening ceremony later, if they show up. I give a moment's thought to cultural symbols — which ones are organic, which are inappropriately borrowed. It turns out I should have gone on thinking about this business of symbols, because it keeps coming up.

Meanwhile, there's a brief introduction to the Peace Camp and its activities. We are told that women have a special commitment to the antinuclear struggle because the same system that makes Sperry, Honeywell, and Control Data do what they do is also responsible for sexism.

This analysis is not elaborated on — at least not here and now. There's a lot of listing in the introductory talk and the calendar of upcoming Peace Camp events, lists couched in the most up-to-the minute vocabulary of Political Correctness — mandatory references to classisms (as if class were primarily a personal or cultural attribute), to anti-Semitism (as if it were not part and parcel of racism, already on the list), and to the differently abled (as if the question of being in a wheelchair or not represented a neutral fact).

If we accept the symbol as an effective reality, we will all be incinerated in a posture of blissful moral righteousness.

of the connection between women's oppression and the war machine, as well as by the strength and cultural identity the women's movement has derived from autonomous organizations. These are two different rationales of why women work for peace as women, but they do tend to get confused.

Anyway, what most people call "sexism," my kid calls "dumb ideas," short for dumb-ideas-about-women-and-men. When I finish my explanation, he comments, "It sounds a little dumb-ideasy to me." Certainly, when it's a man who's gone and attacked a nuclear warhead with hand tools, no one presents him as a daddy and grandpa first of all.

Civil disobedience in the Twin Cities has taken the form of blockades, chiefly at Honeywell, and there have been hundreds of arrests. So people here are interested in the even more direct Ploughshares action and the subsequent legal strategy. The eight of them walked into a General Electric plant at King of Prussia, Pennsylvania, and hammered away at the warheads produced there for some twenty minutes before they were arrested. "In all the years of talks," declares our speaker, "no one before had ever actually *stopped* production of nuclear weapons!"

"The horse really falls on Kate — that's not a symbol!" My own mind flashes back to the Peace Camp and the Ploughshares action. Yes, it's essential for women to get it straight what is and what is not symbolic. But what *do* you do when a horse falls on you?

When I go to see the Dean on Tuesday morning, they say I should mention the interest in Caribbean women's writing that I discussed the day before. "But I told you how that started when I went to Cuba." "Oh, that's cool, you can tell the Dean you've been to Cuba. Just don't tell him you've been to the Peace Camp here!"

The University of Minnesota is ranked fourth, nationally, in corporate gifts to higher education, the only public institution in the top ten. Sperry, Honeywell, Control Data, again.

Tuesday afternoon, we approach the airport from the other direction. No farewell glimpse of the women's camp on my way out of town. But I'm flying on to Reading, Pennsylvania (another interview, another tour of the city). Reading is halfway between Three Mile Island and King of Prussia. On the plane, I revise my literature and literacy lecture, remembering WOMEN LEAVE HOME TO MAKE PEACE.

— Lillian S. Robinson

Short Circuits

HUGE ANTINUKE DEMOS IN AUSTRALIA

More than 250,000 Australians demonstrated for nuclear disarmament on Sunday, April 15.

About 85,000 people converged on the center of Melbourne from five points around the city. At the biggest demonstration, in Sydney, more than 100,000 people marched. Smaller rallies were held in a number of other cities around the country.

The Melbourne and Sydney rallies were much bigger than antinuclear rallies last year. Unions, women's groups, community organizations, churches and others joined in demands including disarmament, the cessation of uranium mining, and the closure of Pine Gap, an American electronic surveillance base.

— The Age 4/16/84

BOLT WEEVILS STRIKE AGAIN

During the night of March 14, the action group "Rheinisch Autonome Freiheitsbewegung" sawed through the corner supports of several high-tension power line pylons near Koblenz, West Germany. In a statement explaining the action, the group declared its opposition to the destruction of forests and to nuclear power.

The group said the action was carefully planned and carried out professionally. They claimed that the severed supports cannot be welded together and that, for safety reasons, the pylons will have to be completely dismantled and rebuilt.

The power line belongs to the large German utility RWE, and is intended to transport excess electricity from the nuclear power plant at Mulheim-Karlich near Koblenz to industrial centers near Bonn. Construction of the power line will destroy 240,000 square meters of forest.

— TAZ 3/28/84

FIVE NUCLEAR UNITS CANCELLED IN SPAIN

Spain's Socialist government decided March 28 to delay construction of five nuclear power units until after 1992, while permitting four others to start up by then.

The postponements resulted from approval by the Socialist Cabinet of a new energy plan for Spain, which cuts nuclear generating capacity to 7500 MW by 1992 in place of the originally projected 12,500 MW. The new energy plan still has to be approved by the Congress of Deputies, but this approval seems likely because of the Socialists' large majority there.

The reduction is based on a projected annual growth in electricity demand of 3.3 percent. Industry Minister Carlos Sochaga said the plan could be revised in three years if these projections prove unrealistic. Spanish utilities pressured the government to add a clause to the new energy plan stating that an additional reactor could be started up before 1992 if electricity demand increases above 3.3 percent.

In Estremadura, workers at two of the units to be closed opposed the government's plans. About 1800 of them occupied buildings there in protest. The occupations lasted several days until government officials promised to find them other jobs for the duration they would have worked at the reactor. The regional government has begun plans for several large dams to provide jobs for the displaced workers.

Although work on all five reactors has stopped, the antinuclear movement in Spain is skeptical about the so-called cancellations. Activists in the Basque country say they will believe in the cancellation of the two units there when they are dismantled.

— Nucleonics Week 4/5/84



The End of the World's Fair and Parade, May 12, 1984 in San Francisco.

photo by Betty Lee

CONGRESS ALLOWS MORE MX MISSILES

In a stunning capitulation to President Reagan, the House agreed May 17 to the production of 15 more MX missiles in 1985.

House Speaker Tip O'Neill had predicted a few days earlier that he had the votes to kill the MX outright and "...put the brakes on this accelerating nuclear arms race by the end of the week."

But Reagan turned on the charm in an impromptu press conference (as he had just a few days earlier when military funds for El Salvador were in trouble) and won a "compromise" that will maintain the current frenzied pace of nuclear rearmament.

The House initially defeated a proposal to kill MX funding for 1985 by a narrow margin, 218 to 212. This left the way open for Les Aspin (D-WI) to engineer a compromise. The compromise called for the production of 15 new MX missiles instead of the 40 that the administration had wanted.

Funding for the 15 missiles will be held up until April 1 ostensibly to give the Soviets a chance to return to arms control talks. However, the Soviets decried the reservations as meaningless and said there was no chance of resuming the abandoned talks as long as new NATO Pershing 2 and cruise missiles are being installed in Europe.

The Soviets also claimed they will match the threat posed by the MX. The USSR has already begun deploying new missiles in East Germany and Czechoslovakia to counter the new NATO missiles.

A negative report on the MX by the GAO released a week prior to the House debate apparently did not sway most Democrats. The GAO found the MX may not be capable of destroying newly-hardened Soviet missile silos and that each missile is already costing 36 percent more than budgeted. In addition, the GAO report said that the MX is being rushed into production to meet its December 31, 1986 deadline without full testing of components like guidance systems and the missile's re-entry vehicle.

In a separate report, the GAO noted that no funds allocated for MX for fiscal 1984 (beginning in October 1983) have yet been spent.

— Ward Young

IAT staff

SILKWOOD LAWYER SAYS FILM DISTORTS FACTS

While the film *Silkwood* makes a positive contribution to the discussion of what happened to Karen Silkwood and shows the sloppy and irresponsible way Kerr-McGee ran its plutonium facility in Cimarron, Oklahoma, it also distorts facts about Karen Silkwood's character, her contamination with plutonium, and her death, according to Danny Sheehan, a lawyer for her estate.

In an interview with Karen Branan, Sheehan said that "the lawyers for Kerr-McGee intimidated the producers and directors of the *Silkwood* film to the point where [the filmmakers] withdrew putting evidence into the film..." The filmmakers tried "to denigrate the character of *Silkwood* to placate Kerr-McGee."

For example, the film makes it look as if the plutonium contamination of *Silkwood's* house came from a spilled urine sample, and that Karen herself contaminated the food in her refrigerator after spilling her urine sample in the bathroom. "The fact of the matter is that the package of bologna and cheese [in the refrigerator] had 400,000 disintegrations per minute of plutonium in it; the bathroom had only 24,000 in it... The motherlode of the plutonium was in the refrigerator."

The film gives the impression that Karen ran off and left her husband and children. In fact, says Sheehan, "her husband ran off with one of Karen's best friends. And the bit about them living in that poor shelter is bullshit, since Karen's friend was a very wealthy woman."

"They said at the end of the film that the circumstances of Karen *Silkwood's* death are not known nor is it known whether or not she had the documents with her that night." On the contrary, says Sheehan, there is undisputed evidence, recognized in court, that she had the documents with her at the time of her death in the car accident.

A legal case brought against Kerr-McGee by Karen *Silkwood's* estate ended January 11, 1984, when the US Supreme Court upheld a lower court ruling that Kerr-McGee would have to pay \$10 million in punitive damages stemming from the radioactive contamination.

— Northern Sun News January-February 1984

YOUR TAX DOLLARS AT WORK

Gould Inc., a defense contractor that sold the Navy hammers at \$436 each, was asked by Congress to explain why the \$7 tool was so expensive. The company gave this breakdown of the costs.

The basic cost of a hammer is \$7 dollars. Then add for each hammer:

- \$41 to pay general overhead costs of Gould's engineering staff involved in mapping out the hammer problem. This figure also includes 12 minutes of secretarial time preparing the hammer purchase order, 26 minutes of management time spent on the hammer purchase, and 2 hours and 36 minutes the engineers spent mulling over the proper design of the hammer.

- \$93 for the 18 minutes it took for "mechanical subassembly" of the hammer, 4 hours for engineers to map out the hammer assembly process, 90 minutes spent by managers overseeing the hammer manufacturing process, 60 minutes for a project engineer to ensure the hammer was properly assembled, 54 minutes spent by quality control engineers examining the hammer to ensure it didn't have any defects, and 7 hours and 48 minutes devoted to other support activities involved in assembling the hammer.

- \$102 went toward "manufacturing overhead."

- \$37 for 60 minutes that Gould's "spares/repair department" spent gearing up for either repairing or finding parts in case the hammer ever breaks.

- \$2 for "material handling overhead" representing the payroll costs for the people to wrap the hammer and send it out.

- \$1 for wrapping paper and the box.

This brought the subtotal for the hammer to \$283.

The \$283 figure was multiplied by a factor of 31.8 percent, representing general administrative costs for Gould. Then another \$56 was added in a finders' fee given Gould for locating the the sort of specific hammer that fitted the Navy's needs.

Another \$7 was said to be the "capital cost of money" Gould expended in the hammer purchases.

— San Francisco Examiner & Chronicle 5/20/84

Lawsuit against Abalone dismissed

While most of the Abalone Alliance has been busy fighting the licensing of Diablo Canyon, a team of antinuclear lawyers has won a victory against a potentially devastating lawsuit against the Alliance, Greenpeace, the American Friends Service Committee, and a number of individual activists.

On April 26 Los Angeles Superior Court Judge Jerry Pact dismissed a lawsuit filed by the conservative Pacific Legal Foundation (PLF) over the 1981 Diablo blockade. The suit, which asked for approximately \$3 million in damages and an injunction against all future blockades, was brought on behalf of San Luis Obispo County, 113 PG&E construction workers, a number of so-called citizens groups, and a group of individuals including former assemblywoman Carol Hallet. PLF also contended that antinuclear groups should pay the costs of law enforcement for the blockade and all rate increases that PG&E attributes to the blockade.

Judge Pact, however, agreed with Abalone attorneys Kathy Fisher and Leonard Post that there was no basis for

any of the plaintiffs to sue for money or injunctive relief. The judge said the construction workers might be able to amend their complaint and continue the suit, but only if they showed a particular injury by an individual demonstrator to a worker as a result of conduct unprotected by the first amendment.

PLF attorneys have told the Abalone's lawyers that they intend to appeal all the way to the US Supreme Court. The lawsuit had threatened to tie up organizers and organizational assets through lengthy pre-trial court proceedings and a costly trial. Discovery proceedings, including depositions and interrogatories, might have been used to pry into the personal lives and organizational history of the defendants and their contributors.

The lawsuit could also have endangered all forms of protest by creating a precedent that allowed the costs of law enforcement to be applied to anyone associated with a protest that is later ruled to have included illegal activity. The effect would be that anyone supporting a demonstration, whether engag-

ing in legal or illegal activity, might be subject to a civil judgment that could take their home, car, or a huge chunk of their income.

The PLF filed the lawsuit in the fall of 1981. The Abalone Alliance sought legal help, but found that most progressive lawyers were unable or unwilling to take on the expense and time of defending the suit against the well-heeled PLF.

Eventually a team of lawyers came together, headed by Fisher, a partner of the San Francisco firm Morrison and Foester, and Post, litigation director for the Western States Legal Foundation in Oakland.

The suit was similar to actions against antinuclear groups in New Hampshire, New York, and Minnesota. Most have been thrown out, but at least one is scheduled to go to trial.

At various times labor, tenant, and civil rights organizations have also been subjected to large civil suits attacking their political action, often resulting in huge judgments. The NAACP suffered a \$1 million judgment for an economic boycott against businesses alleged to be

engaged in racial discrimination before it was overturned by the US Supreme Court.

For the Abalone, the suit represented both a political and a financial threat. The period from 1981 to 1984 has been critical in the fight against Diablo. The spectre of a huge money judgement as well as the effects of discovery proceedings might have chilled activism by creating an atmosphere of fear and intimidation reminiscent of McCarthyism.

The Abalone, however, countered with a two-pronged strategy which has succeeded so far. First, a competent legal team has stymied the lawsuit and neutralized its legal potency. Second, Abalone and the individual defendants have refused to be intimidated and summoned even more energy for organizing. With the dismissal of the lawsuit, it appears the PLF strategy has backfired.

— Alan Ramo

Alan Ramo is an attorney in Oakland and a Director of the Western States Legal Foundation.

Repressive bill before Congress

A series of bills that represent perhaps the most direct assault on civil liberties to appear before Congress in ten years has passed the Senate and is slowly winding its way to the House floor.

The package — a direct descendant of the notorious Nixon-Mitchell S. 1 — would legalize preventive detention, severely curtail freedom of speech, and restore the federal death penalty for crimes such as "treason" and "espionage."

The most far-reaching piece of the package is S. 1762, the "Comprehensive Crime Control Act of 1983." If passed,

it would create a new class of federal felonies; among other things, it would outlaw any "attempt to persuade" others to commit a "violent" act.

In other words, under S. 1762, a person who suggests at a meeting of an antinuclear group that members consider cutting down the fences of a power plant and attempting to occupy the site would be liable for a lengthy federal prison term — even if the suggestion is never carried out.

Companion bills S. 1763, S. 1764, and S. 1765 would allow judges to incarcerate suspected threats to national security, even if those people are not accused

of committing any crime, would set minimum sentencing guidelines for federal judges, would remove *habeas corpus* during times of "national emergency," and would expand the federal death penalty to cover a wide range of anti-government activities.

The Senate passed S. 1762 this spring by a vote of 91 to 1; the only dissent came from Republican Charles Mathias of Maryland, who said he thinks the measure is unconstitutional. Several individual chapters of the legislation — including the preventive detention section — also were passed as separate legislation, to increase their chances of

passing if the entire package somehow is voted down.

The legislation is now before the House Judiciary Committee, and foes fear an attempt may be made to bring at least some of the bills to the floor this fall — when election-conscious Congresspeople will be unlikely to oppose a measure aimed at "cracking down on crime."

More information is available from the National Committee Against Repressive Legislation, 201 Massachusetts Avenue NE #310, Washington, DC 20002, 202-543-7659.

— Tim Redmond

Announcements

PEACE IMAGE FILM FESTIVAL

The *Peace Image Film Festival*, a first-of-its-kind film and video festival focusing on peace, environmental, and nuclear issues, will take place at San Francisco's Concourse at Eighth and Brannan Streets during the week of the Democratic National Convention (July 14-19).

The film festival is part of the "Vision of America at Peace" Exhibition. It will showcase more than 40 films and videotapes by leftist film and video artists. Sponsoring groups include Common Cause, the Sierra Club, Friends of the Earth, and the Union of Concerned Scientists. The festival is co-directed by SF filmmaker David L. Brown and community organizer John Papagni.

Films will run from 2 pm to 10 am; there will be no admission charge. For information call 552-8760 or 929-0766.

STOP DIANNE'S CLEANUP

Although the Democratic convention is still a month away, many people in San Francisco have begun to feel its effects. In a blatant attempt to "clean up" the city for the Democrats and the national media, Mayor Dianne Feinstein has ordered a major crackdown on street people, prostitutes, winos, homeless people and others who may appear "unsavory."

There is little doubt that arrests and "detentions" of hookers, winos, and street people are increasing dramatically. According to some reports, SF Police are driving undesirables as far away as Point Reyes and the Central Valley, and dropping them off alone in the middle of the night — apparently in the hopes they will "relocate."

Taxi drivers have had their livelihood threatened by the addition of 150 cabs, and have had their human rights

and dignity destroyed by the institution of a city-wide dress code — requiring, for example, all male cabbies to wear neckties and shave their beards.

Some gays have begun to question the Mayor's sudden insistence that all gay bathhouses be shut down at once, allegedly because of a "health emergency" (AIDS) that has existed already for at least a year — with little prior attention from Her Honor.

People demanding an end to Dianne's Clean-Up will demonstrate in front of City Hall Tuesday, June 19 at noon. For more information call Geoff at 564-4562.

— Geoff Yippie

ABALONE CANVASS JOBS

You can help us and yourself by doing community outreach and grassroots fundraising. Earn \$\$\$\$\$ and work for a nuclear-free world. Proceeds from the canvass help support Abalone Alliance and *It's About Times*. Call Jim or Nick at 861-0592. Only committed and energetic people need apply.

ABALONE OFFICE VOLUNTEERS NEEDED

We have a wide variety of tasks in the office — some more interesting than others. Give an hour per week or more. Every little bit helps us. There's no \$\$ but lots of gratitude.

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Calendar

June 8-10: Abalone Alliance Statewide Conference to discuss future goals. King's Canyon National Park near Visalia. For info call 861-0592. \$15 charge for camping and food.

June 14: "Perspectives on the US Arms Buildup," analysis by members of the peace and anti-intervention movements. 7:30 pm, La Pena, 3105 Shattuck, Berkeley, 849-2568. \$2.50.

June 15-17: War Resisters League Western Regional Conference: "Moving From Protest to Resistance: Non-violence in 1984." Santa Barbara. For info call 731-1220.

June 16: Peace Day at the San Francisco Fair; film series, parades, games, arts, displays. All day. Fort Mason, SF. For info call 788-6644.

Central America Peace Campaign Mobilization. Volunteers needed for tabling and window sign distribution. Starting at 9:30 am. In SF: Most Holy Redeemer, 117 Diamond at 18th. In East Bay: La Pena Cultural Center, 3105 Shattuck, Berkeley. For info call Bay Area Central America Peace Campaign, 864-5955.

People's Convention Open General Meeting. Everyone welcome to help plan the People's Convention (July 13-16). 11 am to 2 pm. Call 536-2200 for location.

June 19: "Part Way Through Another

Indo-China War," talk by Lady Borton about changes and present situation in Vietnam. 7:30 pm, Modern Times Bookstore, 968 Valencia St., SF. Co-sponsored by American Friends Service Committee. For info call 282-9246. Free.

June 20: "Current Stockholm Arms Control Talks," talk by John Diamante. 7:45 pm, Fort Mason B-340, SF. For info call 673-8866.

June 22: "Applied Reaganism and the Environment," talk by Jonathan Lash about the "devolution" of the EPA. 8 pm, Modern Times Bookstore, 968 Valencia St., SF. For info call 282-9246. Free.

June 23: "Give Peace a Dance!" 12-hour dance marathon for nuclear disarmament and non-intervention. Live bands include Batachanga, Bonnie Hayes and the Wild Combo, The Looters, Noon to Midnight. Pier 2, Fort Mason, SF. For info or to volunteer, call 486-1181 (East Bay) or 861-0226 (San Francisco). \$5 for dancers to pre-register. Entry on day of event is \$7-10 sliding.

Women's Guerilla Theater planning meeting for the Democratic Convention. For info call Basta Ya affinity group, 826-7473.

June 24: Book signing and reception for Charlie Clements, author of "Witness to War," about time spent in El Salvador, 1-3 pm. The Guest House, 300 Page St.,

SF. Salvadorean Medical Relief Fund. For info call 527-8154. Free.

June 30: Central America Peace Campaign Mobilization. See June 16 listing for details.

Central America: workshops and talks include liberation theology and sanctuary. 9 am to 4 pm, followed by El Salvadorean supper. Westminster Presbyterian Church, 13th and N St., Sacramento. Sacramento Religious Community for Peace, 456-2616.

July 1: Political Street Fair sponsored by People's Convention. Booths, food, entertainment. 12-4 pm, Woolsey St. at Shattuck, Berkeley. For info call 644-8115.

July 7: Leafletting Day for People's Convention. For info call 536-2200.

Central America Peace Campaign Mobilization. Volunteers needed for tabling and window sign distribution. For info call 864-5955.

July 8: Fire in the Lake, the San Francisco-based collective of political artists/activists, presents its second of Several Great Performance Parties to benefit its forthcoming book of political art. Music by the reggae band Lockdown. 8 pm, Club 181, 181 Eddy, SF, \$3. For info call 626-1708 or 861-6865.

July 12-13: Jerry Falwell and Phyllis Schlafley speak on "The Threat of Homosexuality" at a pro-family conference. Holiday Inn at Union Square, San Francisco. Sponsored by the Moral Majority and the Free Congress Foundation.

July 13-16: People's Convention

July 14-15: National Conference on

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Registration and the Draft. Workshops and panels include: feminism and the draft, veterans issues, responding to the Democratic Convention. UC-Berkeley campus. For info call 566-0500 or 567-1527. \$5 low income and under eighteen; \$15 otherwise.

July 15: 2nd Annual Nowhere to Run Run. Proceeds to Casa El Salvador, Emergency Relief Fund and LAG. Entertainment, speakers, and prizes. One-mile fun run at 8:30. Five-mile race at 9 am. Southside Polo Field, Golden Gate Park, SF. For info call 658-7805. \$8 before June 25, \$10 through race day, \$2 fun run.

July 17-22: The Plutonium Players present "Bad Mothers: The Further Adventures of Ladies Against Women."

This new comedy explores such contemporary issues as static cling, adoption certificates for the MX Missile, the Bad Motherhood theory of history, and the Nuclear Winter Olympics. The performance will also be shown July 26-29 and August 1-5. All shows are at the Peoples Theater Building B, Fort Mason Center, San Francisco. Tickets: \$5-\$8. For info call 776-8999.

July 20-22: Bohemian Grove Action Network Protest — 1984. July 20: 11 am, Greeting & Vigil (Grove Front Gate, Monte Rio); 6 pm, Community Dinner, Open Mike and Films, (Bohemian Hwy, Occidental); 9 pm, Dance featuring Uncle Wiggly. July 21: 2 pm to dusk, Teach-In, Music & Comic Relief at Sonoma State University, Cotati (by the Duck Pond). This event is free. Donations are needed and welcomed. BGAN (707) 874-2248.

Abalone Alliance Groups

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DIABLO PROJECT OFFICE: 452 Higuera St., San Luis Obispo, CA 93401 • 805-543-6614

NORTH

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P.O. Box 462/95410 • (707) 964-7468

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WOMEN FOR SURVIVAL,
Box 72/95410 • (707) 937-0462

ARCATA:
REDWOOD ALLIANCE,
P.O. Box 293/95521 • (707) 822-7884

BOONVILLE:
ANDERSON VALLEY NUCLEAR AWARENESS COMMITTEE,
P.O. Box 811/95415 • (707) 895-3048

CAMP MEEKER:
NUCLEAR FREE SOCIETY,
P.O. Box 433/95419 • (707) 874-3197

COMPTCHE:
COMPTCHE CITIZENS FOR A SAFE ENVIRONMENT,
P.O. Box 326/95427

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NO NUKE OF THE NORTH,
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358 W. 4th Street/97401

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P.O. Box 902 • (707) 984-6170

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P.O. Box 452/95476 • (707) 996-5123

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1472 St. Helena Hwy./94574 • (707) 963-4728

UKIAH:
NEWTs AGAINST NUKES,
1155 South Dora/95482

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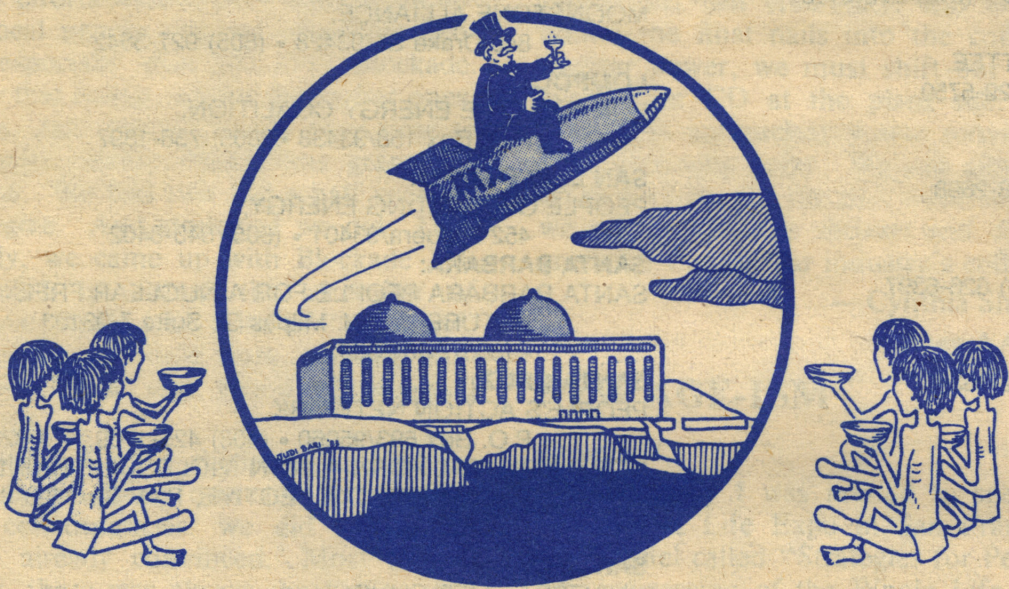
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BOHEMIAN GROVE ACTION NETWORK PROTEST — 1984



FRIDAY, JULY 20

11:00 A.M. (all day) — GREETING & VIGIL (Grove Front Gate, Monte Rio)
6:00 P.M. — COMMUNITY DINNER, OPEN MIKE & FILMS —
OCCIDENTAL COMMUNITY CENTER (Bohemian Hwy., Occidental)
9:00 P.M. — DANCE — Uncle Wiggly

SATURDAY, JULY 21

2:00 P.M. to Dusk — TEACH-IN, MUSIC & COMIC RELIEF (We will start on time)
SONOMA STATE UNIVERSITY — COTATI (by the duck pond)
This event is FREE — Donations are needed & welcomed

A "people's quarantine" blockade will
be held Sunday, July 22; protestors
plan to blockade the Bohos in, to keep
them from spreading their diseased
ideas any further.



"UNITING FOR SURVIVAL"

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Abalone Alliance and War Resisters League Benefit

Comedy by:
Plutonium Players
Paul Krassner
Stoney Burke
Jane Dornacker
Darryl Henriquez
Fran & Charlie
Jim Mars
Righteous Raul
Wavy Gravy

Music by:
The Dead Kennedys
Gunther the Clown
Secret Sons of the Pope
New Breed



Sunday, July 15
Harrison St. Theater

For info call:
Abalone Alliance — 861-0592 or
War Resisters League — 731-1220

171 Harrison Street,
2 blocks from Moscone Center.
6 pm to midnight \$10