

The CPSR Newsletter

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COMPUTER PROFESSIONALS FOR SOCIAL RESPONSIBILITY

Fall 1984

Launch on Warning is Unconstitutional

Cliff Johnson - CPSR/Palo Alto

Clifford Johnson is a member of CPSR/Palo Alto, a British citizen, and a California resident. As an individual at risk, he is suing Caspar Weinberger in the lawsuit described below. Cliff is not a lawyer--he has a Ph.D. in operations research from Oxford. He is Planning and Performance Manager for Stanford's Information Technology Services.

A lawsuit asking for the declaration that nuclear launch on warning capability (LOWC) is unconstitutional is now pending appeal in the Ninth Circuit (San Francisco). LOWC is defined as any set of procedures whereby retaliatory launching of nuclear missiles may occur in response to electronic warning of attacking missiles and prior to the conclusively confirmed commencement of hostilities with any State presumed responsible for the supposed attack. Because LOWC response times are now only five minutes, LOWC must be essentially autonomous, and gives rise to a substantial probability of accidental nuclear war due to computer-related error. The CPSR Executive Committee drafted the following statement endorsing this line of reasoning:

"In all but the simplest computer programs, hidden design flaws can persist, sometimes for years, even though the system appears to work perfectly. Such flaws are revealed only when the system meets a particular set of unforeseen circumstances, at which point the system may suddenly behave erratically. There exist no known methods for eliminating this uncertainty in complex computer systems. To the extent that significant decision making is handled by computers, such design flaws will contribute to inappropriate actions. In particular, a completely automated procedure for deciding to launch missiles that does not allow time for meaningful human deliberation and intervention poses the risk of an accidental launch."

Unconstitutionality is argued on mainly the grounds that this risk substantially surrenders the mandated War Powers of both Congress and the President; the ultimate decision to initiate nuclear conflict must be taken by the political branches, and not "delegated" to error-prone machines. At a hearing on July 18, 1984, the case was dismissed on the grounds that it presented a political question, the factual allegations being unchallenged. However, the judge (Spencer Williams) encouraged an appeal to higher authority, and did not explain away any of the above constitutional argument, which seems sound. Below is the transcript of the hearing; note that "standing" to sue the government depends on whether an alleged injury is particular to the individual bringing suit:

THE COURT: Well, the problem is, Mr. Johnson, I don't think that you can bring an action on the province you have. I just don't think you have -- it's a political issue essentially, it's a matter, a decision by the Executive branch upon which the Judiciary cannot get involved.

MR. JOHNSON: Yes. Your Honor, my argument is that the decision to implement launch-on-warning-capability is an act which exceeds the constitutional authority of the Executive branch because it concedes powers mandated by the Constitution. I am arguing for political power and not against political power.

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CPSR's Board of Directors

Standing: Steve Zilles (Treasurer), Steve Berlin (Northeastern Rep.), Terry Winograd (Director-at-Large), Lucy Suchman (Western Rep.), Alan Borning (Northwestern Rep.), Deborah Estrin (Director-at-Large). Seated: Laura Gould (Secretary), Brian Smith (President), Severo Ornstein (Chairman).

First CPSR Annual Meeting

Greg Nelson - CPSR/Palo Alto

Should CPSR focus on the threat of nuclear war, or invest effort in issues like civil liberties, privacy, and the effects of automation in the work place? Is CPSR a grass-roots activist movement, or an elite forum for technical commentary? How do the chapters relate to the national office? These are some of the topics discussed in the spirited open session at the first Annual Meeting of CPSR, held at the World Affairs Center in San Francisco on Sunday, October 7th, 1984.

Lucy Suchman, co-director of the Palo Alto chapter, presided over the three hour meeting, which was attended by about sixty people. Representatives were present from chapters in Boston, Seattle, Los Angeles, Santa Cruz, Berkeley, San Jose, and Palo Alto. Laura Gould, National Secretary, reported on behalf of the chapters in New York, Pittsburgh, and Madison who were unable to send representatives. Members from areas with no chapters came from Denver, Colorado; Grinnell, Iowa; Portland, Oregon; San Diego, California; and Baltimore, Maryland.

The purpose of the meeting was open discussion; there were no resolutions or binding decisions.

The number of speakers who argued for a narrow focus on the threat of nuclear war was about equal to the number who argued for a broader effort. The arguments for a narrow focus were: that CPSR has limited resources, that the threat of nuclear war overshadows other dangers, that the issue has the best leverage for attracting members and building an organization, and that the organizations that last are those that

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CPSR Board Meeting - October 7, 1984

Laura Gould - National Secretary

Following the CPSR general meeting which lasted from 2 to 5 in the afternoon, the CPSR board met from 7:30 until almost 11. Laura Gould was re-elected to the position of National Secretary (her term had expired), and Deborah Estrin and Terry Winograd were welcomed as the two new Directors-at-Large. The Board also welcomed Douglas McGlashan, a member of the Lawyer's Alliance for Nuclear Arms Control (LANAC). He has agreed to donate his legal services to CPSR while Paul Valentine, who has helped us in this capacity since our inception, takes a sabbatical.

Initial topics discussed were the recently changed method of remitting half the dues to the chapters, which allows them to get more funds sooner; the possibility of raising the dues next year; and the need to distinguish between donations that are meant for a local chapter and those meant for the national office. The decision about raising the dues was delayed pending further study by the Executive Committee. Steve Zilles, the CPSR treasurer, presented financial reports for fiscal 1983 and 1984. A financial statement for fiscal 1984 will appear in the forthcoming Annual Report which will be mailed to all members.

Brian Smith and Severo Ornstein impressed on the Board the seriousness of our need for an Executive Director. Many people have been interviewed, but so far no suitable candidate has been found. It was agreed that we should raise the salary to as much as \$35,000, and a search committee consisting of Deborah Estrin (chair), Marylyn Genovese, Lucy Suchman, and Terry Winograd was formed. Steve Zilles introduced (and the Board approved) a "baseline budget" utilizing our present funds and immediately forthcoming dues income to cover operating expenses over the next six months - as well as guaranteeing salaries for Office Manager and Executive Director for a year.

Some discussion was held about the privacy of the CPSR membership list, in particular with regard to answering requests from members and potential members wanting to obtain the names and addresses of CPSR members in their area. In order to assure the members' privacy, it was agreed that we would not accede to such requests in future. Rather we would try to find a local contact person or send the name of the inquirer to members in the area and allow them to pursue contact if they wished. (The CPSR membership list is not made available to any persons or organizations. We occasionally use the list to do a local mailing for groups, like P&SR, with which we interact.)

A proposed National Advisory Board for CPSR was discussed and Severo Ornstein circulated a list of potential candidates. The NAB is envisioned as fairly small initially, consisting of 12 to 15 people. Their role, besides helping us to establish credibility, would be to advise us on policy, strategy, and long term directions. The Executive Committee will choose a set of people to be approached and write a description of their duties.

The second part of the board meeting started with a summary by Lucy Suchman of the topics raised during the afternoon. No conclusions were reached but further discussion by the Executive Committee was recommended. The remainder of the discussion was devoted to the relationship between the chapters and the national office, and to the question of how chapter projects can become national level projects.

Minutes of the Board Meeting will be made available to the chapters.

Board Election Results

Deborah Estrin and Terry Winograd have been elected to three year terms as Directors-at-Large. Deborah is a graduate student completing her Ph.D. work at MIT; Terry is an Associate Professor at Stanford University. Of the 550 ballots which were mailed, 160 were returned; Deborah and Terry each received 118 votes. Ballots came from as far away as England, Denmark, West Germany, and New Zealand.

ANNUAL MEETING (continued from page 1)

are founded on a deep moral issue. On the other side, it was argued that our organizational charter is broad, that we should be ready to adapt as the revolution in computing raises new social concerns, and that we have a responsibility to use our technical expertise to help other progressive organizations. Several people expressed satisfaction with the current course, which focusses on nuclear war but does not preclude future expansion. Also at issue is the breadth of the nuclear war problem itself, which some but not all see as encompassing militarism, the "deadly connection," and U.S. foreign policy in the third world.

Many different perceptions of CPSR were expressed. "Some of our members want to recreate the sixties; others are sick of the peacenik scene," said a member from Boston. An argument for a broad grass-roots activist organization was that "reason doesn't carry the day, power carries the day." On the other side, a letter was read from a Los Angeles member who said that CPSR is the nearest thing to a peace group that he has ever been associated with, and that CPSR must learn to "tap people on the mental shoulder without scaring them half to death" (see Noteworthy Communications, page 3). Several speakers emphasized that there is a need for informed technical commentary, and that our effectiveness is amplified by our professional credibility.

There seemed to be a general agreement that the national office had the authority to speak on behalf of CPSR, and the responsibility to keep reading the pulse of the organization. Chapters organize their own activities but don't represent their statements as CPSR's. The process used to write the CPSR response to the Strategic Computing Initiative was cited as a model: a draft was written by the national office, then circulated among the chapters, whose comments were incorporated in the final result. But on day-to-day press inquiries, it was remarked that "Severo just has to wing it, then dodge our rocks."

Many other issues were discussed briefly. The critical need to hire an Executive Director surfaced repeatedly. Several people suggested that a speaker's bureau be created. There was also interest in the ways computers can improve organization, ranging from improving electronic mail within CPSR to establishing an electronic democracy in the U.S. The prospects for increasing international contacts in general, and meeting Soviet computer professionals in particular, were also discussed.

The CPSR newsletter is published quarterly by:
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The purpose of the Newsletter is to keep members informed of thought and activity in CPSR. We welcome comments on the content and format of our publication. Most especially, we welcome contributions from our members. Deadline for submissions to the next issue is **December 1, 1984**.

Noteworthy Communications

Admiral Noel Gayler, of the American Committee on East-West Accord, having looked over our Newsletters and other literature, recently made the following thought-provoking observations in a letter to us, parts of which we quote with his permission:

"I like particularly the general conclusion of the German computer professionals that we 'should focus primarily on the prevention of nuclear war.' That is a conclusion I think well supported by the fact that nuclear war is from three orders of magnitude to infinitely worse than anything that has gone before.

"How does all this relate to the military uses of computer technology and AI?

"We should recognize that some computer-aided technologies such as robotics, hitting weapons, target discrimination and aided decision-making may serve to reduce the risk of nuclear war, for example--

They can obviate the "requirement" for battlefield nuclear weapons to redress an imbalance in armored forces.

They can assist intelligence and rapid assessment, reducing the risk of war by miscalculation.

"Nor is it clear that automated response is in and of itself dangerous and undesirable. Certainly it is unthinkable in the context of a nuclear response, for all of the very cogent reasons expressed in your Newsletter. But for collision avoidance in ships or aircraft? Defense of ships against guided missiles? Avoidance maneuvers of satellites under ASAT attack?

"In these examples I attempt to put forward the same thesis as during our discussion--that computer and AI technology is not inherently good or bad in military use. It depends on the context . . .

. . . "All of this is apart from the wisdom or unwisdom of having DoD and DARPA dominate federal funding for computer research. It seems to me the dangers are less in computer research, because of the generality of its applications, than in other fields. On the other hand, if "the system" succeeds in diverting enormous funding into an enterprise as dangerous and foolish as "Star Wars," then there are clearly potentially disastrous consequences. Here again, the context makes all the difference, and rationality must find expression from those who understand the business."

In answering Admiral Gayler's letter, Severo Ornstein made, among others, the following points:

1. There is today complete overlap between nuclear and conventional weapons. Thousands of precision guided intercontinental missiles could turn all our major cities into Dresdens, even without nuclear warheads. Besides, other weapons of mass murder (chemical, biological) are being developed. So we really need to alter the constant mutual menacing of one another if we are to improve our security. That demands a change in posture, strategy, and attitude - not in "hardware."

2. CPSR is certainly not against using computers for collision avoidance. With respect to the other uses he points to, whom would we be confronting? The only relevant adversary for such uses (redressing conventional imbalance, reducing miscalculation risks, dealing with ASAT attacks) is the Soviet

Union. Such developments therefore seem just another piece of provocative preparation for possible war with the Soviets.

3. In fact the way we *actually* tend to use our military force is in "defending our interests" around the world. In excusing this neo-colonialism, we claim "communist aggression" about as glibly as Joe McCarthy once damned innocent people with the appellation "communist." Such misbehavior on our part is not excused by the Soviets' brutal behavior within their own country and in eastern Europe.

* * * * *

The following are excerpts from an open letter to CPSR from Bob Watkins of the Los Angeles chapter. The letter was read at the National Meeting by Rodney Hoffman, treasurer of CPSR/LA, and produced a round of applause.

"... CPSR is my first involvement with anything that could be considered a "peace group." I am very timid in this respect. I cannot see myself becoming involved in a civil disobedience action, or even handing out flyers at a shopping center, for example. Yet I care deeply about how the results of my efforts at my chosen trade are used. There was a void: I wanted to be involved but had no forum.

"Whatever else CPSR may be for seasoned activists, I see it as an ideal "entry point" for computer professionals, an opportunity for caring people who are not activist-oriented to make the first tentative steps toward making a difference. Our scope must range from very gentle overtures toward technical people who aren't used to social issues, to education efforts for those who have recently awakened, to effective programs of involvement to those committed to activism. Al Beebe has written about the tendency of technical people to concentrate on problem solving without considering to what use their work will be put. The first step is to tap these people on the mental shoulder without scaring them half to death. I myself am at the second level: barely awakened, hungry for informational food. The Computers for Peace project at CPSR/Santa Cruz is an action program that represents the third level. To have third level projects that make a difference, we must continuously nourish those members who enter our ranks at the previous two levels. I think the most promising source of new members is at those "pre-activist" levels.

"... To reach these people, CPSR must not become "just another peace group," with the implication that everyone else is a war-monger. We have a valid niche to fill in supplying alternative information to government decision-makers regarding computer systems, their capabilities and limitations. We must not let the Pentagon and the vendors be the only voices. Yet, to do so, we must earn and manifest a position of trust. People must believe that we will be both fair and thorough in our analyses, considering all affected parties.

"I believe that CPSR should be less of an issues organization and more of a project-oriented service organization. That is, it should seek to provide a support network of connections and resources. I have already talked about what meets the needs of the first two levels of involvement. For those committed personally to activism, there should be at any one time, a number of projects underway under the CPSR umbrella. Members may choose to work on any project that is important to them personally. Members may also propose new projects: these become CPSR projects if (a) there is enough member interest and (b) the board feels the project is within the scope of CPSR's goals. If a project fails test (b), members may still undertake it on their own, but may not claim CPSR affiliation."

AAAI '84 Panel on Strategic Computing

Dorothy Mammen - CPSR/Seattle

On August 10th, a panel discussion took place on DARPA's Strategic Computing (SC) Project, as part of the American Association for Artificial Intelligence (AAAI) meeting in Austin, Texas. The panel participants were all from DARPA, and Mark Stefik was the moderator.

Lynn Conway, assistant director of the project, began by giving a general overview. Paul Losleben then described the four main areas of research: *vision*, for following roads and recognizing landmarks; *speech*, to enable real-time speech input to computers; *natural language*, with such goals as understanding the context of discourse; and *expert systems*, focusing on knowledge acquisition and more powerful reasoning and explanation. Steve Squires talked about multiprocessor system architecture, and Clinton Kelley discussed the autonomous land vehicle (ALV) demonstration project.

Following this presentation, questions were answered that had been submitted in advance, and then questions were taken from the audience.

In answer to a question about funding, the distribution was given as roughly 50% devoted to technological development, 25% to military applications, and 25% to infrastructure. Overall, about 40% is going to universities, about 60% to industry.

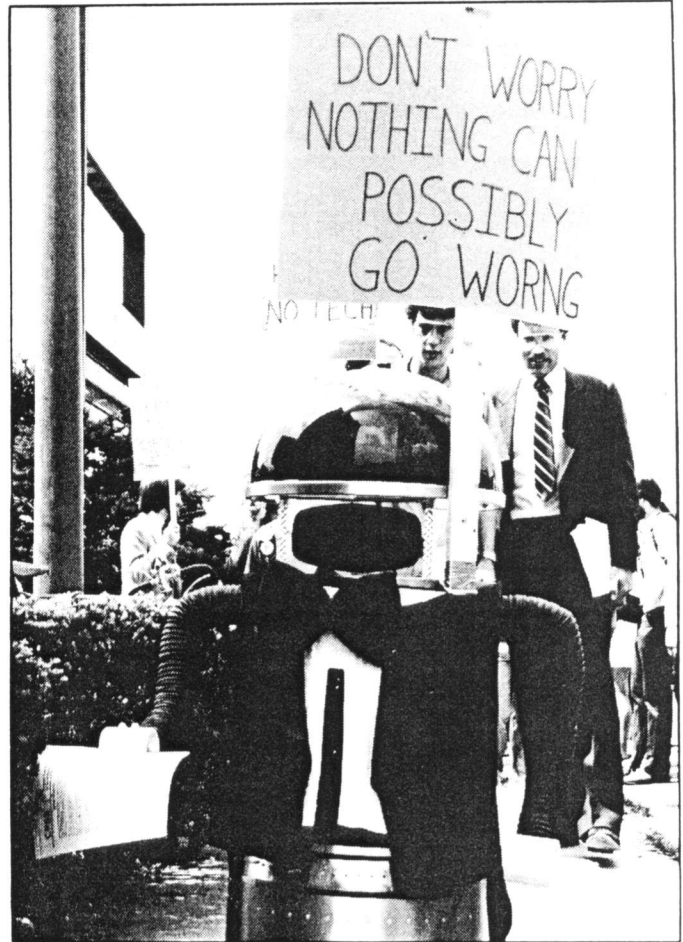
Asked if SC will develop systems for controlling nuclear weapons, Lynn Conway said "No." She added that the word "strategic" had been an unfortunate choice, since this project is unrelated to the Strategic Defense Initiative (known as "Star Wars").

Someone asked whether DARPA will restrict publication of basic research or collaboration with foreign scientists. The answer was that those are DoD and public policy decisions, not established by DARPA. The commercial and defense sectors are concerned about the transfer of information and want to stem the flow. Researchers should make their views known.

As to how DARPA will avoid unreasonably high hopes for computing technology, the answer came that the problem is not a reason to stop funding research. The technical community should inform political leaders on this matter. The milestone demonstrations of the ALV project will be open to the press and public.

A question was asked, whence came such optimism about an expert battle management system, considering that there are no experts on the subject and that there is no room for failure. The response was that commanders will manage battles with the assistance of computers. The computers will be filtering intelligence data, not managing battles.

One questioner made a call to AAAI to pass a resolution condemning the acceptance of funds for research that will lead to mass murder. This question and a similar question were lightly applauded. The response of the panel, which was to treat the questions as non-questions, received much more applause. It was clear that the intent of the panel was to present the facts of DARPA's proposal, not to defend it ethically or morally. If that is to be done, another forum will have to be organized.



Sign-Toting Robot VAL Leads a Protest

VAL the Robot

CPSR/Boston

On Monday, July 30th, CPSR/Boston participated in a demonstration against a local seminar on military uses of robotics entitled "Battlefield/AI Robotics." More than 75 people gathered for an hour; CPSR members made up at least half of the crowd. Other local peace organizations, including High Technology Professionals for Peace, and Science for the People, also were represented. Joseph Weizenbaum, Professor of Computer Science at MIT and a member of CPSR, spoke briefly to the group.

Coverage of the event was carried on the local evening television news, on several radio programs, and in several newspapers; the Boston Globe carried an op-ed piece written by Reid Simmons, Karen Sollins, and Dan Carnese, all members of CPSR/Boston.

Media attention was especially drawn to VAL, a robot which CPSR/Boston rented for the occasion (and which they found by looking in the yellow pages!). The story and picture were picked up by AP wire and carried under the heading "'Hey, nobody's perfect,'" says VAL the robot.' This story appeared on August 1 in the Peninsula Times Tribune in Palo Alto, and no doubt in many other newspapers around the country.

Computer Unreliability and Nuclear War

CPSR/Madison

This article is the second in a series from a paper prepared by CPSR/Madison entitled "Computer Unreliability and Nuclear War." This material was originally prepared for a workshop at a PSR symposium held in Madison, Wisconsin, in October 1983. Remaining Sections will be printed in succeeding Newsletters.

2. Causes of Unreliability

Daniel Stock, Michael Scott

Anyone who has done battle with a computerized billing system realizes that while computers are useful, they are by no means perfect. Computers have problems, and we can classify those problems into three general categories:

- problems with data
- problems with hardware
- problems with software

We discuss each of these categories in turn, and illustrate them with historical examples.

2.1 Data Errors

Data is the information fed into a computer for use in its calculations. Section 1 of this paper has already described the two most important causes of data unreliability in computerized weapons systems: electronic counter-measures and the general havoc of battlefield conditions.

Even a minor data error can have drastic consequences. A town in Rhode Island decided to computerize its tax records in 1972. A misplaced letter 'P' on a single punched card led the town to believe that its tax base was seven million dollars higher than it actually was. As a result of the mistake, the tax rate was set far too low, and the town found itself in a nasty financial bind.

A scarier mistake made the papers on November 9th, 1979. By accident, a war game simulation tape was fed into the computers monitoring American air-space at North American Air Defense (NORAD). Strategic Air Command (SAC) went on immediate alert. B-52 bomber crews were sent to their planes, ten missile intercepting fighter planes were scrambled, and U.S. missiles were readied for launch. The mistake was discovered in only 6 minutes, but it took 20 minutes to return to normal status, and the Soviets had plenty of time to notice our alert and take action of their own.

2.2 Hardware Errors

By "hardware" we mean the actual physical components of a computer system. These components are the least important source of computer unreliability, but even so they cannot be ignored. Physical components wear out, and even brand new parts can be confused by small amounts of natural radiation that destroy the information they contain. Careful quality controls, backup components, and the storage of redundant information can reduce the likelihood of hardware errors, but they cannot prevent them.

Military computers are built to exacting specifications. They break down less often than their civilian counterparts, but they are not foolproof. On June 3rd, 1980, and again on June 6th, a faulty integrated circuit in a Cheyenne Mt. computer announced a Soviet attack. Again SAC was placed on alert. Again human beings caught the mistakes in time.

The Air Force does not publicize such incidents. The three major alerts in 1979 and 1980 were leaked to the press. They prompted a congressional investigation. The investigation revealed that in the 18 month period ending June 30, 1980, there were 151 false alarms at NORAD. Most were prompted by missile tests in Russia. Five were serious enough to put us on alert status. The two not mentioned above were caused by a Soviet submarine test near Japan, and by an old rocket body falling out of orbit. Air Force officials quoted in the congressional study revealed that equipment failures produce two or three false alarms each year.

2.3 Software Errors

The most serious source of unreliability in computer systems is neither data nor hardware. It is software--the programs that tell computers what to do. Typical military programs amount to thousands of pages of code. Human beings are simply not capable of constructing anything that large and that complex without making mistakes. Many errors are detected in simulated tests, but the only practical way to find *all* mistakes is to put a program into use and wait until it misbehaves.

Programming a computer amounts to providing the machine, *in advance*, with instructions for *every possible* situation it may encounter. That isn't easy. Consider some examples:

In one of the simulated flights of the space shuttle, the astronauts decided to abort their flight, then changed their minds, then tried to abort the flight again. The program running in their on-board computer went into an "infinite loop," rendering itself useless. It had never occurred to the programmers that anyone would try to abort the same shuttle flight *twice*.

In the Falklands war, the British ship Sheffield was sunk by a French-made Exocet missile. The British use Exocets themselves. The Sheffield's air-defense computers were programmed to ignore Exocets. Their programmers never expected the Argentinians to use that type of missile.

Many readers will remember the terrible floods on the Colorado River in June of 1983. According to the governor of Nevada, those floods were the direct result of miscalculations by the Federal Bureau of Reclamation's computers. Programmers did not anticipate the bizarre weather caused by the tropical storm El Nino. Their programs kept too much water behind the dams all spring, and when the snow runoff came there wasn't enough room remaining to hold it all.

Even if programmers were smart enough to foresee all contingencies, they would still be left with the incredible task of explaining those contingencies to a computer, in excruciating detail. Slip-ups are inevitable. In March of 1979 the Nuclear Regulatory Commission discovered a bug in the programs that had been used to design five atomic power plants on the East Coast. Because of the bug, the plants would have been unable to survive earthquakes in their area.

There is an endless supply of these examples. Most readers probably remember the computer communications problem that delayed the first flight of the space shuttle. They may not remember that two Mariner space flights were lost completely because of programming errors. One program had a period where there should have been a comma. Another was missing the word 'NOT.'

(continued on page 6)

A more amusing mistake was discovered in simulated tests of the F-16 fighter. Left uncorrected, it would not have been at all amusing to the first pilot to take his craft across the equator. On-board navigation computers would promptly have turned the plane upside down.

2.4 Electromagnetic Pulse

One final source of unreliability is a phenomenon encountered only in the presence of nuclear explosions. It is a problem so severe it threatens every piece of electronic equipment in North America and dashes any hope of waging a "limited" nuclear war. The phenomenon is known as EMP--ElectroMagnetic Pulse. When an atomic bomb is exploded above the earth's atmosphere, gamma rays are released. These gamma rays collide with air molecules in the upper reaches of the atmosphere to produce so-called *Compton Electrons* that are captured by the earth's magnetic field and that lead to a massive jolt of electromagnetic energy blanketing thousands of square miles. A single large bomb detonated 300 miles above Omaha, Nebraska would produce an effect roughly equivalent to striking every medium-sized metal object in the continental United States with a bolt of lightning, all at once. Electric fields of between 25,000 and 50,000 volts per meter would wipe out the commercial communications and power grids, and cripple nearly all computers. Military C³I would be devastated. In the aftermath of EMP, there would be no hope of coordinating the strategy necessary to fight a "protracted," "limited" nuclear war. EMP, combined with our dependence on computerized controls, pushes military planners into a situation where they must fire all their bombs at once, or lose the ability to fire them at all.

Questionnaire Project

CPSR/Seattle

Douglas Schuler of CPSR/Seattle is pursuing a project designed to elicit and present non-military research goals for computer science and AI. As a first step, he proposes that a questionnaire be sent to researchers in a wide range of disciplines. Each would be asked three essay questions:

1. How does your interest or field of study benefit society?
2. What applications using computer technology need to be developed that could hasten the process?
3. How do you view present progress towards these applications and what suggestions could you make to improve this situation?

The project results will be published, and, if the response warrants, the project will be expanded. Mr. Schuler is currently seeking grants or other funding for his project. He can be contacted at 3015 NW 58th St., Seattle, WA 98107.

Computing Assistance for Nicaragua

We have received several communications regarding the search for computing assistance for Nicaragua. The principal need is for technically qualified people who might be able to spend even brief periods of time in Nicaragua doing education, training, etc. Fluency in Spanish is helpful but not necessary. For further information please contact either:

Bernard Winter
Friends of Nicaraguan Culture
P.O. Box 8305
La Jolla, CA 92038
(619) 459-4650

Michael Urmann
tecNICA
110 Brookside Drive
Berkeley, CA 94705
(415) 654-7768

LAUNCH ON WARNING (continued from page 1)

THE COURT: Also, you can't--it's not a question of your own particularized claim of injury; you're representing all the people of the United States.

MR. JOHNSON: No, on the contrary, your Honor, I am only suing on account of my own injuries, not on anyone else's. And this is--

THE COURT: It isn't a matter it was directed at you. For instance, somebody might say, I was injured by the fact that I lived during World War II and we had to get gas ration stamps. Well, that is something they can't sue about, not a particularized injury in the normal sense.

MR. JOHNSON: Yes, but I am not suing on account of that kind of injury. My action is based on unconstitutional action by the Executive branch. In addition, the injury is particularized. The injury is that of risk of loss of life, and in particular, my risk of loss of life is slightly higher than others because I work in a militarily sensitive area. And one could say, therefore, it was slightly different. Moreover, there are several cases in which the Supreme Court has held that injury can be shared by other parties. I would request, your Honor, that we have full time for discussion for this.

THE COURT: Well, I've read your papers, and I am convinced that you do not have a cause of action that you can plead in this case. So, what I am going to do is dismiss it, but give you an opportunity to take it before the Circuit Court of Appeals with higher authority and perhaps greater wisdom.

MR. JOHNSON: Thank you very much, your Honor.

The court's final order apparently granted "standing" to bring suit, but concluded: "It appears, and this court finds that Plaintiff raises a nonjusticiable issue under the political question doctrine, and that Defendant's motion to dismiss, as a matter of law, must be granted." Consequently, the forthcoming appeal to the Ninth Circuit, which was filed September 17, can address the central constitutional issue, rather than collateral technicalities. In a lawsuit of such scope, this is as much as could have been hoped for at this stage of legal process.

CPSR Executive Director Needed

CPSR is still searching for an Executive Director to take over all aspects of managing and building the organization. Responsibilities include fiscal management, development of long-term financial plan, fundraising of annual budget (currently \$150,000), working with board and membership to develop policy and programs, supervision of staff, public relations and media contact, communication with and assistance to chapters, preparation of annual report, membership mailings, and production of newsletter.

Candidates should have extensive nonprofit management and fundraising experience, demonstrated organizational, writing and communication skills, a strong commitment to reducing the threat of nuclear war and to CPSR goals, and the ability to communicate with technical professionals. A dynamic public presence and professional demeanor are essential.

Salary is \$30,000 - \$35,000 plus benefits and two week paid vacation. A commitment of at least two years is required. Applicants should send resumes to the CPSR National office together with references and a letter stating how their experience qualifies them for the position.

Panels/Meetings

In August, Severo Ornstein and Laura Gould attended a week-long "Boston Roundtable" jointly sponsored by the Institute for Policy Studies and the Nation Institute. The Roundtable brought together the leaders of a wide range of "Peace" groups. CPSR's representatives were well received, contributed heavily throughout the week, and made numerous valuable contacts. CPSR received much praise for its work from Kosta Tsipis of MIT, particularly for the Strategic Computing Assessment.

On October 1, Severo Ornstein and Terry Winograd of CPSR appeared with Professor John McCarthy of Stanford on a panel at San Jose State University entitled "Survival and Prosperity: How Should Computers Help Us?" The panel was moderated by Michael Beeson, a professor at San Jose State University and treasurer of CPSR/Santa Cruz. An overflow audience stayed for two hours and questioned the panel extensively.

On October 9 and 10, at the ACM Annual Conference in San Francisco, as part of a Social Impacts track organized by Prof. Rob Kling of U.C. Irvine, there were two panels in which there was heavy participation by CPSR members. Terry Winograd and Paul Smolensky participated with others in a panel on "Ethical Issues in New Computing Technologies." Severo Ornstein chaired a panel on "The Social Dimensions of Reliability of Complex Systems." Panel members included, among others, CPSR members Alan Borning, Peter Neumann, and Greg Nelson. Both panels were well attended and had to be moved to larger rooms than had originally been planned.

CPSR in the News

Besides the extensive coverage of CPSR/Boston's protest of a seminar on battlefield robotics (see VAL the Robot, page 4), we are aware of the following news coverage of CPSR:

August 1 - Datamation published a four-page story entitled "WEIGHING DARPA's AI PLANS" (p. 34). This story includes interviews with a variety of people in the AI community and quotes extensively from CPSR's Assessment of DARPA's Strategic Computing Plan.

September 17 - Severo Ornstein and Lucy Suchman of CPSR/Palo Alto spoke on an hour-long talk show on radio station KFJC in the Palo Alto area entitled "Peninsula People in Politics." Much of the discussion was about Strategic Computing and Star Wars.

October 10 - In conjunction with the ACM Annual Conference, Severo Ornstein was interviewed for CBC radio on the topics of Strategic Computing and "Star Wars." About 5 minutes of this interview were broadcast throughout Canada on the 6 o'clock CBC radio news on October 11. The interview was also used by UPI radio the following weekend.

October 11 - A long story, replete with a very grim looking picture of Severo Ornstein and Laura Gould, was published in the Palo Alto Weekly. The story describes a talk given recently by Lynn Conway, assistant director of DARPA's Strategic Computing Project, in which she spoke about a robot which would "go out and hunt tanks ... we would teach it how to stalk, and how to evade." The article goes on to describe Silicon Valley firms engaged in AI research, and gives a lot of space to CPSR's Strategic Computing Assessment.

From the Secretary's Desk

Laura Gould - CPSR National Secretary

We are indebted to Ted and Carol Kaehler for their generous gift of an Apple III computer for the CPSR office. A computer committee has been formed in Palo Alto, headed by John Larson and Dave Caulkins, whose task is to decide what other hardware and software will be necessary to allow us to do word processing, data base management, and accounting in the office. We will also have a mailbox on the Unix uucp network for communication with various chapters. We hope to have all these services by the first of the year.

We were very encouraged by the participation in CPSR's first National Meeting (see front page story), both in terms of personal attendance and ballot returns (see Election Results, page 2) Many people who were unable to travel to the National Meeting bothered to write opinions about the topics under discussion which they sent with their ballots. These opinions will be integrated with those expressed by attendees as the directors continue to try to chart CPSR's course. The level of response is much appreciated.

Attendance at the CPSR booth at the ACM Annual Conference was also very encouraging - many new members signed up and many interesting conversations took place. The two panels at the conference in which CPSR members participated (see Panels/Meetings, this page) were also very well attended and much praised, and produced a flow of visitors to the CPSR booth as these sessions closed.

Groups similar to CPSR have already formed in Scotland, New Zealand, and West Germany, as reported in the previous Newsletter. We met recently with Dr. Mario Bolognani, a representative of the Italian computer science community, who wishes to organize an Italian group as well. He has invited us to speak at a seminar next fall in Italy on the social and economic risks of computer control of critical environments.

Papers Published or in Progress

Kosta Tsipis of MIT and Charles Zraket, head of the Mitre Corporation, along with numerous others, have encouraged us to write a careful critique of the "Star Wars" proposal - from the point of view of computer limitations. A paper on this topic has been started in Palo Alto. Anyone interested in contributing should contact Greg Nelson via the CPSR national office.

In preparation for the CPSR National Meeting and the ACM Annual Conference, Alan Borning took time to update his Annotated Bibliography on Computer Reliability and Accidental Nuclear War. This up-to-date and expanded bibliography was distributed at both meetings and can now be ordered for \$1 from the CPSR office.

A paper by Alan Borning entitled Computer System Reliability and Nuclear War has been accepted for publication in the Communications of the ACM, pending minor revision.

CPSR's assessment of DoD's Strategic Computing Plan will be published in the December issue of the Bulletin of the Atomic Scientists; a shortened version is expected to appear in the January issue of the Communications of the ACM.