

The Amateur Computerist

Winter 1991

Volume 3 No. 4

Opposing Views On The War And Technology

Hats Off to Patriot

To the editor,

Regardless of your position on the conflict in the Persian Gulf, I believe it is important to note the effectiveness of the Patriot Missile Defense System. This remarkable piece of American technology has saved numerous lives in Saudi Arabia and Israel by its ability to destroy Iraqi SCUD missiles before they reach their targets. Perhaps more significant, the Patriot system has possibly saved countless other lives by averting retaliation on Iraq from Israel. I believe this is a vivid example of the role that engineering has in our society.

As an engineer and former auto worker, I have been sensitive to the many claims that American engineering is "second rate" and the source of inferior technology. The Patriot system is an example that should counter those claims.

Moreover, the success of the Patriot is a reason to reconsider our nation's Strategic Defense Initiative ("Star Wars"). We should take a close look at developing advanced technology and cultivation people with advanced skills to counter threats like the ones we are seeing today.

Hats off to the men and women of Raytheon, developers of the Patriot, for a job well done.

Dr. Paul J. Eagle

Assistant Professor

College of Engineering

(Reprinted from *Varsity News*, Jan. 30, 1991, page 6, University of Detroit.)

Table OF Contents

Hats Off To Patriot	1
Amateurs Needed More Than Ever	1
Coco Corner	2
Bringing Automation Home	3
BBS Discussion On The War	4
Computers for the People	9

Amateurs Are Needed More Than Ever

Dear Editor,

The war against Iraq calls into question the purpose of the *Amateur Computerist* newsletter. The war has been proclaimed as the war of "smart" weapons. "Smart" meaning computer controlled and guided. Because of complete control of access to information about the use and success of these weapons, a great victory has been claimed for them.

These weapons have been developed by professionals. Their proclaimed overwhelming success would suggest that amateur computing is no longer needed. It seems like professional computing can accomplish with near 100% efficiency any task set for it. Also, since this success was achieved via secrecy, the principle of open access and public domain would appear to be obsolete. Therefore, if you believe what is being said about the "smart" weapons and in general about the great victory they have won, you should agree the *Amateur Computerist* is no longer needed or wanted.

But...should you believe what is being said about the "smart" weapons? Those who developed and produced these weapons also developed and deployed the shuttle Challenger and the Hubble telescope. With the first introduction of a new computer product there are always bugs to get out, unexpected results, and many trips back to the dealer until the product can produce the desired result. In fact, isn't this war partially a beta-testing of these new "smart" weapons and establishing them as battle tested so they can sell better?

Secrecy and single source of information has never conveyed a picture that has held up when other sources of information become available. National Public Radio, while whole-heartedly conveying the

censored news given it by the military and participating in its own self censorship about anti-war demonstrations, nevertheless suggested that the near 100% efficiency claimed for smart weapons used against Iraq is probably more like 60%. The British press reported a 50% success rate. It is also being acknowledged that some Patriot missiles misfired and one out of every three U.S. anti-tank launchers misfired at least occasionally.

The first premise of the *Amateur Computerist* is that amateurs have been and remain essential to the development of computers and computing. The personal computer grew out of and could only have grown out of the activity of amateurs. The big computer companies saw the sale of monster mainframes to Fortune 500 companies and major universities as the only possible profitable market. It took the anti-Vietnam war spirit and the activities of groups like the San Francisco Homebrew Club to develop computers for the people. It was only because of this grassroots pressure and under the democratic rules of open and non-proprietary architecture that IBM and other corporations could come into the personal computer field.

The second premise of the *Amateur Computerist* is that technological development requires free and uncensored flow of information and ideas. It is the sharing of innovations, the acknowledged building of each others' advances that distinguishes the amateurs from the professionals. Public domain, open access, no copy protection, and hacking are the methods of the amateurs that stimulate development and innovation. The professionals, corporations and governments seek secrecy, patents, copy protection, etc.

When the purposeful confusion is pierced, it will turn out that the *Amateur Computerist* and journals like it are needed even more than ever. The truth about the war and about the problems with the latest technology can only be uncovered and examined by an uncensored press. And to prevent computers from being hated around the world by most people who will see them only as machines of more precise murder, the true value and development of computers and computing must be vigorously defended by the computer's true friends, the amateur computerists.

Stop the war against Iraq now, support the *Amateur Computerist*, computers for life not for death.

Jay Hauben

Coco Corner

by Scot McMahan

Several issues ago, I hinted at the possibility of PEEKing into the memory to "see" what is on the screen, and possible changing it by POKEing around. Why would anyone want to do that? The TRS-80 Color Computer 2, while having a printer, does not have any command which allows you to print a hard copy of the screen. You can't "print screen" like you can on other computers. Plus, messing around in the memory is fun (ever try POKE 113,0?).

Before we get in too deep, a little background: The TRS-80 has 65535 locations in its memory. In these locations are stored numbers. The computer does all that it does by moving those numbers around. BASIC was invented so that you would not have to understand how the moving numbers worked, and to give you a language to program in which is more like English. But there are still some things that can be done by manipulating the numbers in memory that you can't do in BASIC. The two BASIC words you need are PEEK and POKE. PEEK lets you look into a memory location. You need to treat PEEK as a variable, since it returns a number that must either be printed on the screen, assigned to a variable, or used in a numeric expression. Here are some examples of PEEK in use:

```
10 PRINT PEEK (3455)
20 A = PEEK (3455)
30 PRINT (CHR$(PEEK(3455)))
```

POKE is a command. When you say POKE 113,0, you are telling the computer to put the numbered line of a program, or with PRINT, but POKE can be used directly.

With that out of the way, let's turn our attention to the memory area between 1024 and 1535, inclusive. If you prefer hexadecimal, and you really have no reason to, it's &H400 to &H5FF. This area is your screen. The PEEK numbers you get for any of these memory locations are the Character Strings (ASCII numbers) for each character that is on the screen (and remember a blank space is # 32).

You can POKE in any number between 0 and 255 to this area and a character will appear on the screen.

This technique could be used in a variety of programs, including special text effects like words travelling from one side of the screen to the other. One additional feature this POKEing around can get you is the ability to print the screen's contents on the printer. Observe the following subroutine:

```
1000 REM PRINTSCREEN
1010 FOR P = 1024 TO 1535
1020 C = PEEK (P)
1030 PRINT # -2, CHR$ (C);
1040 NEXT P
```

This subroutine can be called any time you need to make a hard copy.

Next time, I am going to present a program that uses the low resolution graphics characters to allow you to draw on the screen and then print out a copy.

While you're at it, remember that **COMPUTERS ARE ONLY AS GOOD AS WHAT YOU PUT INTO THEM!**

Bringing Automation Home

by M.A. White

The Office revolution has finally come to us all. Computers, which were once seen as complicated machines that only a person with a PhD could understand, have moved out of those back rooms and air-conditioned closets. As they became smaller and easier to use, they became a common sight in offices. And people who had become used to the convenience of word processors and spreadsheets were reluctant to go home and use typewriters or simple calculators. And so, personal computers began returning home.

But in migrating into the office area, computers also became more complex. Features such as super graphics boards, scanners, and mice were added on. Terminals went from flat black and green screens to high resolution color displays with a staggering number of colors. And, with people clamoring for desktop-sized computers, more companies jumped into the profitable PC market. Instead of three or four major brands, the first time buyer is now faced with a bewildering lineup of names and numbers and letters.

People who work with a variety of computers

and programs in their offices usually have no trouble deciding what they want to buy for home use. However, this isn't necessarily helpful to the neophyte. Ask six computer experts which machines to buy, and you're very likely to get six different answers.

So who's got the right advice for you? The answer is that you do. Other people bought their systems for reasons that may be very different from your own reasons for having a computer and the system that works best for a graphics expert may be an expensive waste of money for someone who wants to do music.

So the first thing that the new computer buyer has to answer is: "What do you want your computer to do for you?"

Many first-time buyers want a computer to run games and educational software for children. Others intend to run home management software such as budgets, recipes, schedules, and address books while turning out occasional letters. But an increasing number of people are buying computers to work on office projects at home.

If you are buying a computer for games or educational software, then the job of deciding which one to buy is simple a matter of deciding which one offers the most features for the money you can afford to spend. A trip to stores in your area that sell computers and programs will quickly give you the answer. Look at the programs that are available for each type of computer, decide which computer has the biggest selection of programs that you like, and buy the system that runs that sort of software.

To decide which options you need, look on the software boxes. This will tell you whether you need to buy a computer with one or two floppy drives, how much memory your new computer will need, and what special equipment you might also need to buy – such as a mouse or a graphics tablet. You should also ask if you could load and run some of the programs you want to buy. This is particularly important if you're buying programs that involve music or graphics. What sounds good on a box may be very difficult to learn; hands-on experience will tell you which one of these programs is the best buy for your purposes.

If you are buying a computer for personal home management, your best strategy is to take a close look at the software first. This is particularly true if you are planning on buying financial software. The printouts produced by these packages are not

standard. Some reports will be right for investment portfolios but useless for budget management while others may balance a checkbook and write checks for your bills but not be able to keep track of your tax deductions.

You should also ask for a hands-on demonstration of the programs to make sure that they are easy to use and easy to understand. While a business may be able to buy software and discard it if it's not right, the average person can't afford to take that sort of costly chance. Trying out software is the only way to tell if it works for you. Remember that what one person thinks is an easy program to use may be difficult for another to understand. Choose the software that works best for you – not the one that your cousin likes best.

Once you pick the right programs for you, read the boxes to find out what features to buy with your computer. Pay attention to the brand of printers and mice that your software recommends and buy one of those. Don't be drawn into buying a "printer/mouse that emulates a so-and-so printer/mouse." Not all "emulations" work well, and dealing with an incompatible piece of hardware can be the biggest nightmare of all. Unless you've got a qualified computer service technician in your immediate family, use the adage "Better safe than sorry" as a guideline. It may be a bit more expensive, but it will be less of a headache in the long run.

If you're one of the thousands of people who wants to bring your office work home, you'll find that there are very few cheap options available. For most people, the best move is to buy a system nearly identical to the one you've got at the office. There are a few places where you can cut corners to save dollars. For instance, you can save a lot of money by buying a less expensive clone or compatible machine – but first insist on seeing if your office programs run on that machine. There are slight differences in the internal commands in each different brand of computer. If the software you are buying is written for one particular machine, it may have hidden traps in it so that it can't be run on another brand of computer.

If you are not doing CAD, or artwork at home, you can cut the price of your system by several hundred dollars by buying a less expensive monitor and monitor card. You can also cut the cost of your system by buying a smaller hard drive. Although

many offices need hard drives of 60 Megabytes or larger, you may find a 30 or 40 Megabyte drive is more than sufficient for you. You can also consider buying a slower machine than you would need for the office. Most programs can also make use of cheaper mice and cheaper printers, but check the package that you are buying first. The first-time buyer is better off buying only the products listed on the package itself.

Once you've bought your computer and programs, the next step is to get it set up at home. If you've never set up a machine by yourself, talk to people at your local computer club and people at work who have similar machines and ask their advice. Most of them will be glad to show you how to set up a machine, load the programs, and start them running.

Bringing home a first computer is an exciting experience but with a little care and a little pre-planning, it will be a happy experience for you.

Computer BBS Discussion On The War

(Editor's note: there was a difference of opinion on the staff regarding censorship of the following article. Some of the staff felt censorship is offensive. Others felt certain words in the article were offensive. We need input from our readers on where they stand on this censorship.)

During the recent war, most of the U.S. press agreed to accept government censorship and to refrain from publishing anti-war articles, reports of anti-war demonstrations, etc. The March on Washington against the War on January 26, 1991 involving over 250,000 people went unreported in major newspapers like the *Detroit News* and *Detroit Free Press*; there was scant mention of it in the *New York Times*, etc. During the recent war, it became clear that the American people need an alternative form of media if they are to maintain any semblance of free speech or free press during the times the U.S. government goes rushing off to make war abroad or at home.

During the recent war, computer bulletin boards provided a place for those with differing views on the war to discuss and debate those views. A recent article reprinted in the magazine *Utne Reader*, no. 44, March/April 1991 describes the important role

that discussion and debate have played historically in bringing about needed social change. (See "Salons through history", by John Berendt, originally from *Esquire*, November, 1990.) Other articles in this issue of *Utne Review* describe how computer bulletin boards play a role akin to that of the Salons in France or Russia before the revolutions there.

The following is an excerpt from a discussions about the war on a limited access bulletin board in Michigan.

Item 13 01:43 Jan15/91 John L.
Crisis in the Gulf

How do people feel about the Gulf crisis, the draft, the prospect of lots of innocent people dying. I realize that that was fairly nebulous. I just thought it would be good to have a space for people to talk about their feelings on this issue.

73 responses

Jan15/91 01:53 13:1) John L.

I'm scared. I don't want my friends in the service to die, the people of the countries involved to die, and I don't want to die. I can comprehend the arguments about oil, sovereignty, etc., they just seem kind of hollow in the face of war. I guess that I thought that maybe by this point in the time line, we could do away with "real politic" and "hard ball." Kind of naive, but it is a thought. (sorry for the misspells)

Jan15/91 20:48 13:2) Andy M.

One thing first...I'm not a pacifist. I do believe that there are indeed times when military force is necessary. However, the present situation doesn't make the grade. We should sit still and wait for another six months or so to really give the economic sanctions a chance to work. War now is unnecessary and wrong. Bush screwed us all by putting us into a classical dilemma: if we don't act tonight, we're a bunch of soft Western turkeys. If we do act tonight, we're just stupid. This deadline stuff is a bunch of nonsense.

Jan18/91 00:45 13:3) Jesse W.

War is mass murder. Conscription is slavery. The national interest of the U.S. is not served in the Gulf.

Jan18/91 13:31 13:4) Elizabeth S.

I am saddened by the recent actions in the Gulf. It's very depressing to know we are at war and people are dying. I hope Israel doesn't get dragged into this, even though they've already been bombed, because it will complicate matters and possibly make things 10 times worse. Sigh. I haven't gone to classes in two days –

I am exhausted and drained.

Jan18/91 16:48 13:5) Alissa P.

I think that this war should be called "The Prime Time War." What do all of you think? It makes sense, doesn't it?

Jan18/91 19:48 13:6) John F.

Absolutely. I find the wave of post-bombing protests extremely frustrating. Where were all of these peace loving citizens back in October when some noise might've affected policy-making? The U.S. pushed this resolution through the UN and committed a huge, offensive force to the region, thus painting itself into a corner. Once a deadline was set, turning back was close to impossible. Still very little dissent was heard from Americans. Only when destruction and killing began did it hit people that this was all "for real." Of course those opposed to war should let the administration know how they feel, but I'm sad to say no amount of love-bead rattling will now alter the course of events.

Jan19/91 00:08 13:7) Jesse W.

Well, I for one was demonstrating way back in August.

Jan19/91 13:00 13:8) Andy M.

What about us DISGUSTED by the protests here? I went briefly to the vigil held at 11:30 pm a couple of days ago at the Onion. You know...the one where it was raining cats and dogs? Well, I listened to some of the speakers, and I listened to the a***** standing next to me, and I almost decided that it was good that we were at war.

Unfortunately, protests attract not only peace-minded people, but specific interest groups with their own independent agendas. Then they force their stupid agendas on all of us. At the vigil, I heard a large number of anti-Semitic people screaming out for the eradication of Isreal. Likewise, I heard people advocating the nuclear destruction of Iraq.

The rallies, protests, and the whole dumb war are all stunning examples of reasons not to be religious: religion is an artificial device to divide humanity. A diest might suggest that Satan created the institution. In any case, I stay away from demonstrations so I don't get counted with anti-Semites from the BSU or Wild-Eyed Zionist crazies from some other campus group.

Jan19/91 15:33 13:9) Jesse W.

Well, I'm all for anti-Zionism, of course, but there was a lot of crap in those speeches.

Jan20/91 21:49 13:10) Eric F.

This whole situation has had a devastating effect upon me. I am dead set against having used and currently using force in the Gulf. I want to make my opposition to the killing known. I however am also frustrated to no end by the anti-war movement on this campus and around the country. It in my eyes is a political anti-war movement. While I happen to agree to various extent with some of the points made by the movement, this is neither the time nor place to politicize it. I would prefer (and consider myself to be) a Peace Activist based on morals, spirituality, religion, emotion (whatever one may call it) rather than an political anti-war activist. I give credit for the vows of non-violence taken. But Peace to me is infinitely more than non-violence. Peace is love, compassion, respect for your opposition. Self-suffering to instill change in the hearts of others, rather than intimidation of others. My beliefs are largely Gandhian in nature. Peace

Jan20/91 23:22 13:11) Larry K.

In a broad sense, any "anti-war" (or "pro-war") activity will be "political." The problem with a lot of the current "anti-war" effort is that it carries with it a lot of "political" baggage that gets in the way more than it helps. It is quite prepared to re-protest the Vietnam war, and it is well prepared to make sure America keeps its hands off Nicaragua, but I don't think it knows how to deal with the particulars of the Gulf War. Eric, maybe you could organize an NFLO movement. (NFLO = non far left opposition.) Actually, I don't care too much what the "anti-war" crowd does, since I believe President Bush made the right decision, although it is a genuinely grim situation. But the left wing crazies give us all a little comic relief, with all their talk of building takeovers, etc., etc. (There is also a LOT of intelligent opposition to the war, and that's a good thing, even though I don't personally agree with it.)

Jan21/91 16:37 13:12) Andy M.

Jesse, MTS garbled your last response. Could you please paraphrase it?

Jan21/91 22:15 13:13) John F.

The point about special-interest groups (maybe that's not the right word, here) using whatever cause or the current outrage to pursue their own agenda is nothing new and should be expected. Many feel just that way about most of the protest activity on this campus. It's important to try to see past that to those who are truly

concerned about the issue and are not out to exploit the occasion. What are those people saying? My point was that even the most genuine, well meaning protesters mainly are "too little, too late." It's disheartening, I find.

Jan22/91 17:00 13:14) Andy M.

I agree John. In addition, though, I was wondering what was the point of rallies "for Israel" or "Anti-war" or "In Support of our Soldiers". I mean, I was one of the first to jump on the bandwagon for the SRC protests. I seriously considered "going in" with the people who took the administrative offices. However, what can possibly be the point of protesting the war? I'm not being cynical or sarcastic. I usually show up at most of the protests anyway if only because I think they've got the right idea. The time to protest is when Bush comes up for re-election, and when it comes time to evaluate our congresspeople who "decided not to decide" about war.

Anyone else read "The Anarchist's Cookbook"? As silly as it is, I think Powell was kind of accurate when he said that Political protests are for people who want moral freedom from national wrongdoing, and are liberated from blame by police harassment, crowd violence, and other little tidbits indicating martyrdom.

Jan23/91 01:25 13:19) Manuel O.

The protests are worthless and disheartening to our troops. I have talked to various people with relatives there, or else on their way to the Gulf. They all said that they are p***** off and worried about the protests. Anti-war demonstrators harassing ROTC's didn't help at all either. At this point they are just plain Anti-American statements, although there are folks who are well intentioned. Their results will just be to freak our troops out, they think they will be spit at. This is such b*****.

Jan23/91 11:31 13:20) Melissa L.

The protests are not anti-American... that is the same b***** that protestors heard in the 60's and 70's. I could not believe the mentality of the counter-demonstrators when they started shouting things like, "You pinko commies! Go back to where you came from if you don't like it!" My God, don't the counter-protestors - and the American public ever listen to what's being said? I spent the majority of my time chanting "Support the troops by bringing them home" The majority of protestors do not hate our troops for being there... we hate Bush for putting them there. I don't want these people dead - I want them to come home,

alive, NOW. I think it is more "anti-American" to support them being there – and dying – then to want them to come home.

Jan23/91 20:06 13:21) Manuel O.

During the Vietnam war (by 1968) the anti-war movement was in the hand of groups like the SDS who supported the enemy. In many documentaries you could see protestors with the Vietcong flag, that is treason in my view. Read the accounts of the troops, who returned home to cries of "baby-killing m*****". All these people were doing was performing their duty, and fighting a vicious Communist enemy. Looking back I can't believe morons like Jane Fonda were supporting the NVA, especially after seeing how those b***** tortured our pilots, (like Saddam is doing) and killed their own people. The people who say "bring the troops home", are just being unrealistic. In Vietnam eight year of protests just caused a lengthening of our presence there, and ultimately a dishonorable withdrawal. Remember that when we left South Vietnam, we also stopped supporting that government. The power vacuum caused the collapse of the South Vietnamese government, the more than one million boat-people, and the Khmer Rouge in Cambodia. At this point we can not just take our troops home. We are engaged and we have to prevail. Screwing up our troops morale, will just cause casualties.

Jan23/91 21:01 13:22) Andy M.

Manuel, if our troops had not been in Vietnam, they would not have been called baby-killing m*****. If our troops had not been in Vietnam, they would not have been killed and tortured.

If our troops were not in Iraq right now, we could avoid the killing, the name-calling, and the anti-patriotism. We could be proud to be American. Bring the troops home now...before it's too late. Peace.

Jan23/91 23:56 13:23) Bob C.

Manuel, I don't see any factual evidence backing up your claim that the protests during the Viet Nam war caused a lengthening of the conflict, and a "dishonorable withdrawal." If you can prove it to me, I will be glad to listen. From what I understand, the war was prolonged by generals like Westmoreland who saw the Vietnamese as unintelligent and disorganized. He was notorious for underestimating the enemy. We were in a war with no clear reason for existence,

facing a culture we didn't understand, and an arrogance that the mighty West would prevail in the end. Sound familiar? It is for these reasons that we would be walking into another Viet Nam, not because of protesters. I have a cousin with the USS America Carrier Group in the Red Sea. He says that the general attitude among the troops is that the protesters are just exercising their freedoms. He agrees with me when I say that nowhere in the First Amendment does it say that the right to peaceably assemble shall be suspended in wartime. That is what so many of the "patriotic Americans" are asking us to do by trying to squelch protests. I feel that this country was founded by women and men who questioned the status quo. It is that questioning, and continual struggle for change and betterment that I see as patriotism.

Jan24/91 13:44 13:24) Elizabeth S.

I think it is patriotic to protest, organize and burn flags. It shows that you care about America and you believe in the rights guaranteed by the Constitution and Bill of Rights. One can be against U.S. involvement in the mid-east and still support the troops. We all want them home alive.

Jan24/91 16:03 13:25) Andy M.

Unpatriotic are the couch potatoes who sit at home and don't do anything, just like the majority of our population who refuse to vote.

Jan24/91 16:43 13:26) Dave D.

Yes, we all do want the troops home alive, and hopefully not to affected by the atrocious paradoxes of war.

Jan24/91 18:01 13:27) Larry K.

I'd like to see the troops home alive and victorious. Elizabeth: It may be patriotic to defend the "right" of people to burn flags if they want to (especially Iraqi flags!), but actually BURNING an American flag is NOT patriotic at all (unless, of course, one's "patriotic" impulses are attached to a country hostile to the U.S.A.)

Jan24/91 19:29 13:28) Melissa L.

Larry, the fact that we can burn the flag is a tribute to America.

Jan24/91 20:19 13:29) Sara S.

Can we please leave the flag issue out of the Gulf debate and continue it elsewhere? What about the extraordinary number of single parents, particularly mothers, who have been called up to active duty from the reserves? The ones who joined the reserves for extra tuition \$\$, health care benefits and retirement

security? Who will take care of their children/families for the *2* years they are in the desert sands? And what about the de-stabilizing effects this war will have on the entire Gulf region and the world order henceforth? Try going an entire day without meeting a person who does not know or is related to someone serving over there at present.

Jan26/91 00:44 13:30) Jesse W.

Andy: the garbled word is "anti-Zionism."

Manuel: this is odd to hear you say, since you yourself, presumably out of patriotism, supported a not-always-humane (by your own admission) rebellion aimed at overthrowing the government of your native land. Where's your consistency?

Jan26/91 13:29 13:31) Andy M.

I think I missed something very large and important here. Manuel, will you fill me in on what Jesse mentions in 13:30? Thanx.

Jan26/91 14:52 13:32) Eric F.

Andy re: 4: While I think voting is an absolute necessity, I also feel that political action must be taken beyond merely showing up at the polls. I think we should make known to our elected representatives when they are failing to represent us. We need to call, write, etc... But we need to go farther. Issue education of our self and others is vital to prepare us to vote "correctly" (and to encourage candidates to support these issues). And I believe if these fail, in going farther. I do believe that the student movement of the sixties helped end the Viet Nam Hell. I also think that when our soldiers are fighting in the name of America, they are in some sense fighting in my name as an American. I don't support this, and thus wish to make it very clear to the rest of us Americans, that this killing in our collective name does not include my name. For the same reason I am bothered by certain actions of the Anti-war movement. One Anti-war friend recently told me that it didn't matter that ROTC tires were slashed because whoever did it was not representative of the Anti-war movement. I disagree. I argue that in that it was done in our collective name of the Anti-war movement, that it very much concerns us.

Jan26/91 15:00 13:33) Eric F.

Another point: the anti-war movement keeps claiming support of the troops, but hate for the administration. While I agree with showing respect for the troops, I also believe that in expressing conflict with the administration or others, we not physically threaten,

verbally threaten etc... We must show respect for all people, we must show compassion for all people. While we should confront them when we feel wronged, we should do so peacefully, if Peace is in fact what we are striving for. This allows for Civil Disobedience along the lines of Pledge of Resistance or Gandhi, etc...

Jan27/91 00:01 13:34) Melissa L.

Eric, beautiful words. I don't agree with attacking ROTC people. I think that is wrong. Especially considering the stance that the anti-war movement is taking. They (We?) are stating that this is a racist war because of the high number of minorities in Saudi. Many of these people join the military to pay for college because they have no other means. I, therefore, think it is hypocritical to attack those in ROTC...these are the people we're supposedly fighting for.

Jan27/91 17:40 13:35) Manuel O

Vietnam was drawn out to the extent that the anti-war movement affected key decisions by congress, by its sheer influence. Thus the bombing of Cambodia, a military action that was defensible in terms of eliminating the enemies supply lines and personnel, was seen as some sort of genocide. And it p***** a lot of congressional people off. The lowest moment for the anti-war movement was after the war (for us) had ended. They lobbied very hard, in a congress where some activists had already been elected, to stop aid to the hard pressed South Vietnamese. This meant not giving those poor people ammunition to fight the Communist b***** who took over. Even more hypocritical was there stance not to condemn that nasty regime.

Jan27/91 18:59 13:36) Jesse W.

Joan Baez condemned that nasty regime.

Feb03/91 21:26 13:37) Manuel O.

Yeah, and she got in a lot of s*** for it too, from the hard-left.

Feb04/91 00:48 13:38) Andy M.

Manuel, could you include subject-references in your responses? I tend to lose track of who you mean by "she", "he", "it", "them", etc.

Feb06/91 04:11 13:39) Jesse W.

She got in s*** from the Hayden/Fonda crowd that was pro-Vietnam-government (and also from David Dellinger, who is anti-communist but doesn't really act very consistently all the time), but was defended by other leftists, too, Manuel.

Feb06/91 15:44 13:40) Andy M.

Jesse, you too! When you open your response with "She" (resp 39), tell us who "She" is!

Feb06/91 22:27 13:41) Jesse W.

Joan Baez, as I said in :36.

Feb07/91 01:05 13:42) Eric F.

Thanks for reminding us Jesse. I only got responses 39 and on, and considering that I don't know how to use this confer properly, I would have been stuck for trying to look back just a few responses to find the subject. Thanks.

Feb07/91 01:37 13:43) Jesse W.

Gosh. You're welcome. Are we all happy now?

Feb07/91 15:31 13:44) Andy M.

Ecstatic, thanks Jesse!

Feb07/91 18:25 13:45) Eric F.

:>

Feb08/91 01:03 13:46) Rodney W.

Yeah!

Feb08/91 15:16 13:47) Andrew L.

I have serious doubts as to how closely this situation really resembles Viet Nam. Global politics have changed vastly since that war, it is being fought in a differ

Feb08/91 15:22 13:48) Andrew L.

I'm sorry about that last garbled attempt at a response. Now let's see if I can work with the computer in a more -well-cooperative manner. I think that the situation now is very different than it was at any time during the Vietnam war. I'm not saying that in support of the current policy however. Despite opposition to the war, though, I have serious doubts about the feasibility or desirability of the sort of withdrawal the protests seem to demand. How do people envision ending the war? What kind of post-war situation can we realistically hope for?

Feb09/91 13:33 13:49) Eric F.

Well, we've worked ourselves into a nasty one haven't we. I feel that we cannot continue doing "the wrong thing" just because we are afraid of losing face in the light of admitting our mistake. I would urge an immediate cease-fire, but a continuation of the blockade. Immediate negotiations for Iraqi withdraw and the reconstruction of both Kuwait and Iraq. Also general regional negotiations for a Palestinian solution, fresh-water supply solution, and human rights issues. Obviously this won't all come at once, but we can at least try. We have told Iraq that it has erred and that it must withdraw regardless of "losing face." I would

argue the same for us. We have erred in escalating hostilities, we must end our wrong, admit our wrong regardless of "losing face".

Feb09/91 15:55 13:50) Andy M.

Bravo Eric.

Feb09/91 17:32 13:51) Ranjan B.

It would be wonderful if it were to happen, but it just won't. We've been committed to this game of "chicken" since at least November when we tripled the number of troops in Saudi Arabia. When's the last time we as a nation backed down from anything? Withdrawal from Vietnam is the most recent, and it was politically costly. Before that? Hell, JFK almost got us into WW3 over the Cuban Missile Crisis. Kruschev was the one who backed down. Unfortunately, the resolution of this thing is going to be dependent on how long the Iraqis continue to fight. Hopefully it will be soon.

Computers for the People: A History or How The Hackers Gave Birth To The Personal Computer

by Ronda Hauben

In 1976, a speaker by the name of Ted Nelson was invited to speak before the National Conference of county and local government officials on the topic of Computer Lib. His talk was scheduled to begin at 8 am.

At the set time, Ted Nelson appeared dressed in Harvard school tie and prep-school blazer. He began his talk by turning up the volume of a tape recorder, so that the theme from "2001: A Space Odyssey" blasted through the room. He turned on his slide projector showing the sun rising over a big rock. The second slide, showed an Altair 8800 microcomputer sitting on a rock. The next slide showed Ted Nelson standing on the rock and holding the computer triumphantly over his head.

"Ted Nelson shouted that for too long computers had been the sole possession of superior-acting professionals in air-conditioned computer centers." But now computers like the Altair were becoming easily available, selling in computer chain stores that

were springing up around the country. He ended his talk with the “2001 theme” again, played at rock concert volume, yelling “DEMYSTIFY COMPUTERS, COMPUTERS BELONG TO ALL MANKIND” and other revolutionary phrases about giving computer power to the people.

The response to his talk was that the audience stood up and applauded for five minutes.

(Taken from *Silicon Valley Fever*, Rogers and Larsen, N.Y., p 3-4)

Ted Nelson was the spokesperson for a movement of hobbyists and computer enthusiasts who were determined to get computers into the hands of people. As another computer pioneer, Robert Marsh, explains:

“We didn’t have many things you take for granted today, but we did have a feeling of excitement and pioneers in a new era in which small computers would free everyone from much of the drudgery of everyday life. A feeling that we were secretly taking control of information and power jealously guarded by the Fortune 500 owners of multi-million dollar IBM mainframes. A feeling that the world never be the same once ‘hobby computers’ really caught on.” (“1975: Ancient History,” *Creative Computing*, Nov. 1984, p 110)

These computer pioneers feared that computers would be used for harm if their use was restricted to the rich and powerful. And conversely, they felt that the world would be a better place if the computer could be put into the hands of the “masses.” But to do this, there needed to be a computer that was priced in a range that people could afford.

A writer in *Byte* magazine in 1978, in an article called “The First Ten Years of Amateur Computing” wrote, “Most people I meet are under the mistaken notion that personal computing started only two or three years ago, with the introduction of the Altair 8800 by MITS. Nothing could be further from the truth. In fact, the amateur computing hobby was then almost ten years old....”

(By Sol Libes, July 1978, pg 64-71)

The writer goes on to explain:

“If one could find a specific date for the birth of personal computing, it would be May 5, 1966. For it was on that date that Steven B. Gray founded the Amateur Computer Society and began publishing a quarterly called the *ACS Newsletter*”

Gray, who was the computer editor of the magazine *Electronics* published by McGraw Hill, felt

that he would learn a lot if he could build a computer. But he found it was really hard to get started. After years of trying to work on his own, he realized that there must be other hobbyists also working on their own. He felt it would be helpful to share the information he had with others and get help from them with the problems he was encountering. So on May 5, 1966, Stephen B. Gray, sent out a letter to ten hobbyist or electronics magazines. In the letter he wrote:

“This is an invitation to those readers who are building their own computers to join the Amateur Computer Society, a nonprofit group open to anyone interested in building and operating a digital computer that will at least perform automatic multiplication and division, on is of a comparable complexity.

“The society publishes a bimonthly newsletter containing problems and answers, information about where to get parts and schematics and cheap ICs, and articles on subjects such as Teletype equipment and checking out magnetic cores.

“Will interested readers please write to me, giving details on their proposed or in-the-works computers, such as word length, number of instructions, sources of parts and schematics, clever solutions to previous problems, etc.?”

(From “The Early Days” by Stephen B. Gray, *Creative Computing*, Nov. 1984, p 6)

Gray reports that he received responses from 160 men from five countries and 27 states and 110 eventually became members. For \$3 they got a year’s issues of the *ACS Newsletter* (Amateur Computer Society). In 1976, the newsletter was discontinued. Gray wrote in the final issue:

“Times have changed, and now that kits are so prevalent, there are other publications that serve the readers’ purpose better than the *ACS Newsletter*. Also the *ACS Newsletter* always depended heavily upon reader input, and this input has dwindled.... Thank you for your support over the last 10 ½ years. It was fun while it lasted.”

In 1966-67 Gray tried to get financial backing for a full time Amateur Computer Society. He wrote several foundations and large computer manufacturers, but received no support. He tried again to find some kind of financial support several years later when he tried to write a book about the beginnings of the personal computer. Again, he got no response.

A similar story is told by David Ahl, who later became editor of the magazine *Creative Computing*.

Ahl worked at Digital Equipment Corporation and began to see a need for a computer that would be available in public schools, elementary, secondary, and colleges. Also he felt there needed to be discussion of the social aspect of the computer, of its effect on jobs, medical care, privacy, etc. He conceived of a magazine that he would call *Creative Computing*. He thought that the National Science Foundation ought to be willing to provide some funding. He'd found lots of encouragement for his ideas. However, when he actually tried to get some financial support, he found himself being passed from door to door. He decided to convert the extensive proposal he had created for the National Science Foundation into a more general proposal and he submitted it to 36 foundations. Again he found no financial support. Then he sent his proposal around to 106 companies. Only seven even bothered to reply to all, and with the exception of three offers of some advertising help, all of the other responses were negative. ("David Tells Ahl", *ibid.*, p 67)

Thus he realized that if he was going to put out *Creative Computing*, he would have to pay for it himself. He then sent out a mailing to 11,000 people. He received 850 subscriptions. On Oct 7, 1974 the first issue came off the presses – it was 8,000 copies. *Creative Computing* was launched, but not with any help from the business world.

During the period as David Ahl was trying to get *Creative Computing* started, there were other important events that helped to set the stage for the personam computer revolution.

In May, 1974, the *Washington Post* and Dell Publishers published transcripts of the Watergate period in American history was being exposed and made public. The hidden attacks on political opposition were unveiled. The war waged by the FBI and CIA against the anti-war movement had been revealed and documented. The American people had helped pull their government out of the Vietnam War and had removed a President from office who had condoned illegal activities and the suppression of the right to free speech and dissent.

In July, 1974, *Radio Electronics*, a hobbyist magazine ran a story "Build the Mark-8, Your Personal Minicomputer." The article was only 4 pages long, it was fairly technical and it didn't provide the information one would need to build a machine. But it advertised a 48 page instruction manual available for \$5.50. 10,000 people wrote and bought the instruction book

and one fourth that many wrote for the circuit boards advertised for those who wanted to build their own.

(Continued in next issue)

EDITORIAL STAFF

Ronda Hauben
William Rohler
Norman O. Thompson

Technical Editor

Michael Hauben

The *Amateur Computerist* invites contribution of articles, programs etc. Send submissions to: R.Hauben P.O. Box 4344, Dearborn, Mi. 48126. One year subscription (4 issues) costs \$5.00(US). Add *\$2.50 for foreign postage. Permission is granted to reprint any article herein, provided credit is given.