Concerning Portable Pensions

Mr. Mario T. Noto
Special Counsel
Senate Subcommittee on Labor
Washington, D.C.

Dear Mr. Noto:

It has come to my attention through the IEEE Computer Society that the Senate Subcommittee on Labor is interested in obtaining letters from our membership on their problems with company pension plans. I should like to tell you of my experiences in support of legislation that would better ensure the financial security of employees upon retirement.

During the past seven years I have twice changed employment. Since I had not been employed long enough by my previous employers to qualify for vested rights in their pension or retirement plans, I lost seven years of investment in some form of a permanent plan. My first position was with a university for two years as an instructor, while my second was with a R&D company for five years as an electronics engineer. It is the pension plan of my second employer I wish to discuss. I believe it to be typical of many plans offered to those employed in the aerospace as well as the electronics industry in general.

The requirements and features of this plan are summarized as follows:

a. The employee must be employed for one year before he can enter the pension plan.

b. The employee is entitled to vested rights only after 10 years of employment, should he change employers and wish to retain his pension until retirement.

c. The employer matched the employee's contributions into the plan.

For young engineers entering industry, I have observed that it is not unusual for their average length of employment to be from three to five years depending upon the opportunities in industry, while for experienced engineers an average of at least five years of employment with the same company is not uncommon.

During my employment I had gained valuable job experience. Towards the end it was obvious that my future was uncertain since the company changed ownership three times during the five years I was employed. I then resigned receiving a $1200 refund from the pension plan while losing the matching $1200, since I had not worked long enough to be entitled to vested rights. As you can see, such plans as I have described tend to reduce or minimize the amount of matching monies the employer must leave in the pension fund while depriving the employee of any real permanent pension.

The solution to such problems as this one would be:

a. To enact legislation providing for portable pensions, perhaps underwritten by commercial insurance companies.

b. To enact legislation establishing reasonable maximums upon waiting period for vested rights.

c. To enact legislation providing for the contribution by each employer into a pension fund managed by the engineering society to which the employee may belong or designate.

Although I have more than 30 years before I retire, it seems unlikely, unless I resign myself to employment for an appreciable length of service with two or three employers and at the personal risk of becoming obsolete, that I can avail myself of such pension plans as the one I have described.

Dr. Eugene P. Kaiser
Reston, Virginia

Testing an oath

Harry T. Larson

S. H. Unger's article "The Need for Heroes" (COMPUTER, Jan/Feb 1972) has received favorable comment from a number of readers. Mr. Unger has presented thoughts and experience worth serious consideration.

One oath he quoted and suggested as a basis for discussion contains the following line:

I will not use my scientific training for any purpose which I believe will be used to the harm of any human being.

Many respond to this form of oath with cynicism and quick rejection. They may be right in doing so. While I don't reject it out of hand, each time I give thought to such an oath, I have reached the melancholy conclusion that it cannot be a useful guide for conduct in the real world of computer engineering.

To test this conclusion, and to keep the discussion of this oath going, I'd like to share my rationale with you. Perhaps you can flaw my reasoning.

For me, the line quoted above triggers several cross-currents of thought and emotion, including: here we go again; wonder why some people in every field of science and engineering must start from scratch and go through this phase; strong emotional appeal, because it suggests a noble ethic to live by; the hopeless feeling that there is no place in computer engineering where the oath permits one to work. Maybe I'm wrong, maybe there is some place. On logical grounds it seems unlikely, because there appears to be a fundamental mismatch between the extreme nature of the statement and the fact that real world situations and people are almost always a mixture of good and evil, of helpful and harmful.

One realistic way to test the suggested oath is to try it out on our own activities and those around us, and generalize in a hopefully valid way, to determine how the oath would
I wonder how any man who works on a scientific or engineering computer design can be sure it won’t be used to harm any human being. The reasoning here is fairly obvious, but I have found to my surprise that it isn’t obvious to everyone (especially young idealists). So allow me to pause briefly on some real world experience to pin down the point.

The first computer I worked on ran for about 15 years, sometimes two and three shifts, in a university and government lab environment, performing a wide spectrum of work. At one end of the spectrum, it was used in automobile traffic simulation, which I believe on balance to be a useful endeavor. At the other end of the spectrum, the machine was employed in my presence to determine local optima in a mathematical exercise that could readily be used to determine the most effective places to set off a given number of atom bombs in a given geographical area in order to do the most damage.

The modern designer of a computer to be manufactured in quantity has the same problem in spades.

Is not the researcher on advanced components in the same fix? If his work is effective, the components will be used in who knows what computer, for who knows what application.

How about process control computers and business data processors— are they ok? It’s true that they are not intended for purposes that do physical harm. But there are other kinds of harm, which I learned about the hard way, when I first worked on new applications of computers in business and industry. We caused substantial changes in the way things were done in offices and factories, and it wasn’t long before I discovered that I had done great harm to some people, because they resisted change, because I had wrecked the foundations of their security and self esteem, because they could not cope. This is a profound kind of harm—not physical, but perhaps worse. Is this kind of harm to human beings ok under this oath? I think not.

In computer engineering we have a clearer case. We know that we contribute to a very fundamental process, information processing, and we know that process runs through nearly every facet of society, good and bad alike, military and non-military alike. By this straightforward line of reasoning, can we not almost guarantee that our work will help to harm a human being?

So I’ve looked back and around, and so far find nothing that satisfies the oath. I’ve undoubtedly missed some important area of activity. Is there a corner where a man can work, if he chooses to live within the oath? If the engineering profession were to adopt such an oath, then would it not work out that all or most of us must get out of computer engineering? Perhaps that’s what the oath writer had in mind.

Does not the oath presume too much a two-valued world, in which there exists one set of activities that harm, and another set of computer engineering activities that can do no harm? Is it not the sad truth that the second set is a null set?

In all this, I’ve taken the position of a jury member on a crime involving capital punishment, where I’ve assumed I must believe beyond all reasonable doubt. Is this too extreme? If so, how can we clearly word a departure from this extreme position? Or does the whole thing seem academic to you, as it does to me? In the above, I’ve proven that I’ve contributed to activities that harm human beings in much of what I’ve done. But I look at these things on balance, weigh the good with the bad, and believe that the good out-balances the bad. It seems to me that this, in the final analysis, is the judgment every thinking man must make in the real world. A tough, uncertain judgment indeed, but realistic.

I’ve skirted an issue many of us must live with. Much work not mentioned above has been on classified military projects. My stand on this should be stated, because it influences any judgment about the oath. Perhaps those of you that work on military projects reason the way I do. I work from the ugly but unavoidable fact that we have a bully in our world midst, called Communism. Said bully has announced clearly and repeatedly that he will take over the world. He is making very effective progress on that plan, moving out inexorably, using a variety of techniques. And he has proven a thousand times over that he will break any “agreement” whenever convenient, that he does not play by our principles of conduct, and understands only one language: Force. I figure his system is terribly harmful to humans, and I don’t want it imposed on me or my descendants, so I am satisfied that defense work is essential for the survival of our way of life.

I accept that evil exists in society and in the world. I accept that one must face up to it, to hold off the bully, and we are forced by necessity to allow ourselves to be dragged down partly to his level of conduct, whilst we buy the time for mankind to mature a bit more, and grope for a better way to treat each other.

Thus, realities as I see them say that I must help on systems that kill, in order to help others (us) from being killed or taken over by a system that we know will be deeply harmful, for it will destroy most of our fundamental hard-won rights. A nightmare of a rationalization if used lightly, because it can escalate, to justify almost any action, if one is not hanging grimly onto oneself. Amidst this set of realities, the oath is simply not meaningful.

This is ground that has been covered by many branches of science and engineering before us — old stuff. I’ve gone over elementary points above because I’ve found in discussions down through the years that idealists tend not to make that next step to real-world cases, and because I’ve found that taking them into real cases is a healthy experience for both of us.

We are faced with nothing basically new in mankind. Most realities are a mixture of good and bad. Our technology is more all-pervasive than most. In the face of these simple facts, can we develop an ethic that will serve as a guideline for all computer engineers?

It is my belief that the breed of men involved in computers is a blend of idealism, pragmatism, intelligence and iconoclasm that can carry us into new ground. Who shall step forward?

Harry T. Larson