

# **FIGHTING CHANCE**

*John 8: 31-32*

*Proverbs 22: 3*

Newsletter Vol. III, No. 5

August 1991

## **CIVIL WAR IN THE SOVIET UNION**

Great popular interest is now focused on the question of whether or not civil war will break out in the Soviet Union. Since the Soviets have over 10,000 nuclear warheads aimed at our families and since our politicians lack the backbone to deploy a strategic defense and a civil defense, Soviet stability is a real concern.

To Soviet citizens who are currently dying under the guns of the Red Army it may seem that civil war has already begun. By any realistic definition, however, the Soviet Union has always been in a state of civil war. In this century about one person of every 50 in communist countries has been murdered by his own government. This is the way that they keep the other 49 enslaved. It has proved to be a very successful method of totalitarian control.

It is wise to keep in mind that all communist "leaders" have risen to power under this system. They are professional butchers, and they are very good at their jobs.

We have been astonished by the claims of some members of the press and American establishment that the new "openness" in the Soviet Union shows that they are no longer a threat. They now admit that their government killed tens of millions of its own citizens in the past. They now admit that they lied about their murder of the passengers aboard KAL 007. They now admit that they have routinely and deliberately cheated on virtually all disarmament treaties with the United States.

They say that they are sorry and will not do these things any more. So, President Bush is now signing away much of the remaining American military security in new disarmament treaties - and the communists keep right on killing their own citizens. Well, it is hard to learn to be good. President Bush promises that they really will reform - before they start killing us.

Soviet civil war should actually be defined as a successful internal conflict in which significant parts of the Soviet Union pass entirely beyond the control of the Soviet central government. This has not yet happened; the Soviets have a successful record of preventing it by military action; and the United States government is doing everything in its power to help the Soviets maintain control.

Our politicians and their handlers, too, derive their personal power and wealth from centralized political control of a large nation. As a result of the limits placed upon them by our founding fathers two hundred years ago, that control is exercised differently than in the Soviet Union.

In general the governments of the world's large nations support each other and support the concept of increasing their power through tighter control over the citizens under their jurisdiction. They see a threat to one as a threat to all and are rushing to save the Soviet central government.

More control and even world government is deemed to be desirable. Decentralization is deemed to be undesirable by those whose personal wealth and power is derived from centralized control. As regards the personal welfare of the common man or woman, decentralization is entirely preferable. Decentralization leads to more freedom, more individual wealth, faster human progress, and greater safety from war, disablement, and death.

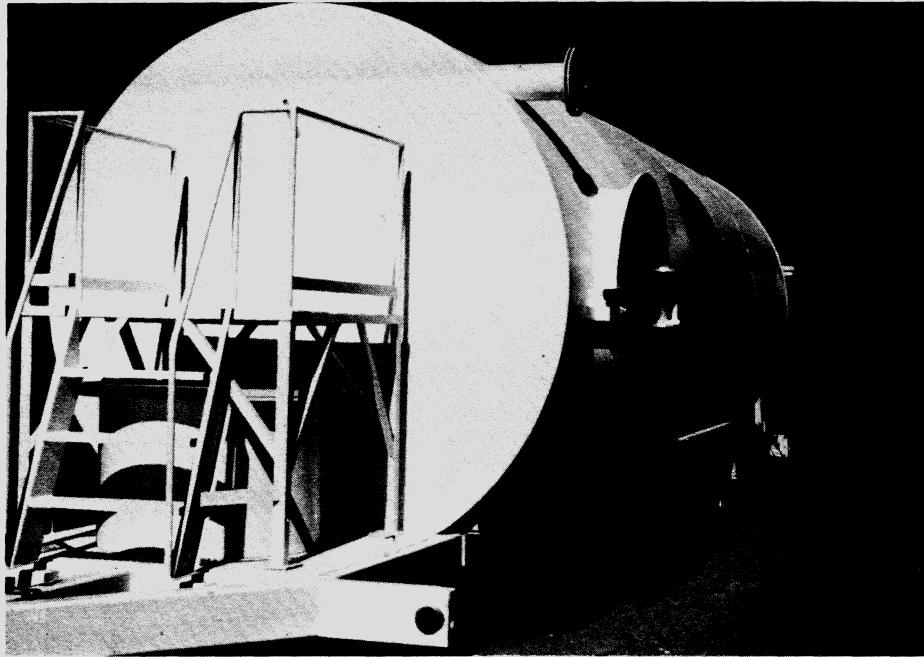
Soviet civil war is not yet occurring. The probability of civil war has risen. It would be better for the Soviet people and for the American people if a Soviet civil war did take place with fragmentation of the country into smaller republics. The record of recent history suggests that this probably will not happen.

## **ARIZONA MOBILE SHELTER DISPLAY**

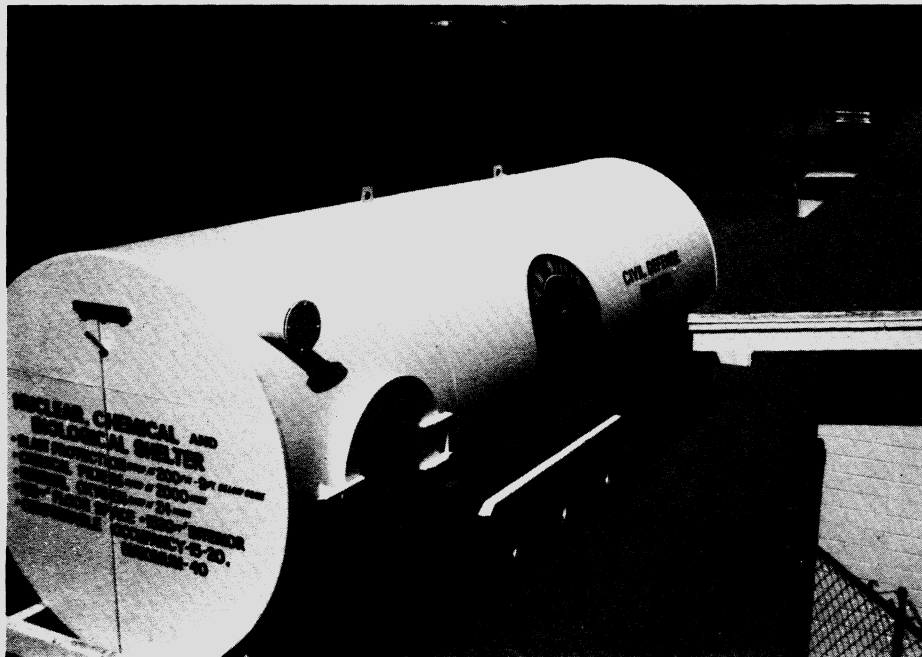
The photographs below show the Arizona mobile shelter display. The children and I delivered this to Arizona a few weeks ago. Its first use was by a volunteer civil defense group. (The odd camera angles are the result of our having neglected to take pictures before we had parked it in the driveway of a civil defense activist in Arizona.)

This display will be paid for 75% by a Federal Emergency Management Agency (FEMA) grant to Arizona and 25% by Fighting Chance. The Fighting Chance funds were donated to Arizona through the Physicians for Civil Defense in Arizona, because they expect to use this shelter display extensively.

With each new display, there is the problem of ultimately paying our share of the cost and also the problem of advancing the total cost for the many months delay between construction and bureaucratic payment of the FEMA share while the appropriation slowly finds its way through the Federal and State bureaucracies. In the case of the Arizona display, half of the necessary funds were loaned by Fighting Chance and half by Doctors for



Front View of Arizona Mobile Shelter Display



Rear View of Display

Disaster Preparedness. These funds will be returned when the government payment is received.

The steel fabrication, wiring, and painting of the seals was done by professionals in Ashland and Medford, Oregon. In order to reduce costs, the children and I and other volunteers installed interior items in the display and delivered it ourselves.

The first major use of the shelter will be at the national convention of the American Legion in Phoenix, August 31 to September 5. The Legion has 3 million members. About 30,000 are expected at this convention. This use by the American Legion and the American Legion Northeastern tour with the Pennsylvania mobile display last fall are encouraging developments. The State of Maine American Legion has now voted to raise the money from members to build a mobile shelter display of their own.

The American Legion has a long-standing position in support of civil defense. Like most Americans, however, their support has been too passive to have much effect. They do show the American flag, however, at parades and events throughout the United States.

The State of Maine American Legion is learning that the flag is even more effectively shown when attached to a 7-ton 35-foot-long mobile shelter float with 4-foot-high American Legion insignia on both sides. If this catches the interest of other state American Legion organizations, they could play a very important part in getting effective homeland defenses for America.

In September, the Arizona display will be transported to Las Vegas for the Doctors for Disaster Preparedness meeting September 21 and 22.

### **DDP MEETING ADDS OUTSTANDING SPEAKERS**

In addition to those listed in our May, 1991 newsletter, Doctors for Disaster Preparedness has now added a remarkable group of additional speakers for their September 21-22 meeting in Las Vegas. The group of speakers for this meeting (each of whom will make a full one hour presentation and be available for individual discussions) is the most outstanding group of homeland defense speakers that we have ever known to be assembled for one event. The additional speakers include:

- Major General Yaacov Lapidot - Major General Lapidot is Assistant to the Israeli Minister of Defense for Civil Defense. He is in charge of all civil defense for the country of Israel. Especially in view of Israel's recent experiences with Scud attacks during the Iraq-Kuwait war, his presentation alone justifies the trip to Las Vegas. Major General Lapidot stands in marked contrast to the paper shuffling, do-very-little bureaucrats who have been given responsibility for the civil defense protection of the American people.

With immediate prior assignments as Commander of the Israeli National Defense College and as Deputy Commander of the Israeli Ground Forces Command, Major General

Lapidot (who is 49 years old) rose through the ranks from Sergeant Tank Commander, to Tank Company Commander, to Tank Battalion Commander, to Commander of the Israeli Armored Corps Officers School, to Tank Brigade Commander, to Commander of an Armored Division. He fought in the major Israeli tank battles between 1960 and 1983 including the battles in Syria, the Six-Day War, the raids in the Sinai, the Suez Canal, and the Yom Kippur War.

We would give much to see the scene if this kind of man were given control of the American government civil defense program for even a few weeks. He wouldn't need his tanks, but he might need an armored division of dump trucks to carry away the politicians, bureaucrats, and paper that stand between Americans and a credible homeland defense.

- Lowell Wood - Dr. Wood is credited with developing the Brilliant Pebbles strategic defense system that should already be in orbit and protecting Americans. I asked that Dr. Wood be invited and am looking forward to his presentation for more than just his accomplishments in strategic defense. He is also in a struggle for an American mission to Mars that has deep implications for the future of the United States.

President Kennedy realized that America needs security and also a sense of purpose. He advocated and worked effectively for strategic defense, civil defense, and the program to put men on the moon. These programs are technologically interrelated.

The moon program, however, was more important to our national survival than many might realize. It gave our country a "New Frontier" as Kennedy called it. It gave each American a chance to be part of something exciting, adventuresome, and important to the future of mankind. Our people need that sort of vision for the future in order to have the will to survive into the future.

If no productive outlet for this national need is available, destructive adventures will take its place. These are most likely to be foreign wars and imperialism - exactly the sort of activity that can get our country destroyed in a Third World War.

Saddam Hussein is surely a tyrant with the potential to use weapons of mass destruction. So are dozens of other national "leaders" including the thugs in the Soviet Union, China, and Syria - our current "friends." The proper approach is to protect ourselves from these butchers with good strategic and civil defense, maintain enough offensive power to worry them as well, and then do things so productive and inspiring that others will want to be a part of our efforts rather than theirs. American technology should be building a better and more productive future for mankind - not killing hundreds of thousands of innocent Arabs and their families.

After the moon, we should have gone to Mars. Lowell Wood still wants to go.

So do an army of bureaucrats, politicians, and industrial hangers-on. They want \$300 billion of taxpayer money and 30 years to do the job. Actually, they want career-long free rides at their desks financed by the worthy goal of space exploration.

Lowell Wood says we can get to Mars (manned exploration - machines are nice, but men and women are paying the bill and they don't get too excited about cute little robots) in 8 years for a cost of \$30 billion with mostly off-the-shelf technology. The bureaucrats and hangers-on are furious. They see him as a threat to their 30-year gravy train. I do too.

- Dixy Lee Ray - Dr. Ray is former governor of the state of Washington and former Chairman of the Atomic Energy Commission. In recent years, she has been an outspoken advocate of rationality and scientific truth in opposition to the irrational, falsehood-based, pseudo-environmentalist craze of earth and animal worship that is sweeping the United States.

Our schools are in disarray and an anti-technology, anti-science attitude is rising to dangerous prominence among uneducated (not unschooled) Americans. The public schools no longer effectively teach the mathematics, science, and rational thought that is essential to our survival. Dr. Ray is a scientist who has been working against the myths and superstitions that are beginning to pass for American national domestic policy.

Our roads are in disrepair, but rebuilding our mental infrastructure is far more important. Dr. Ray is helping to do that. Each of us should listen to her analyses and do our part to help.

- In addition to these three, DDP has invited other remarkable people. Those who have already agreed to participate include Steve Alley - the man behind the American Legion mobile shelter display effort; Brian Bex, an articulate speaker against American bureaucracy; and Patrick Michaels, an authority on the "greenhouse effect" - another non-problem that is being used to hobble American progress.

- Add these people to those whom we described in the May newsletter - Cresson Kearny, Edwin York, Conrad Chester, Grant Peterson or John McKay, Jane Orient, Sharon Packer, Ken Lucas, Howard Maccabee, and Gerald Looney and you have a meeting that no one should miss.

- I also will be speaking at this meeting on the subject of nutrition and food storage in normal times and in times of crisis. The children and I will assist in showing the mobile display shelter. We hope to see many of you there.

## **PARADES AND MOBILE SHELTER DISPLAYS**

Reprinted below is the first page from the monthly civil defense newsletter published by the Bonneville County Civil Defense Agency in Idaho. This is a state agency, partially funded by Idaho and partially by FEMA, that is responsible for disaster preparedness in Bonneville County, Idaho.

The newsletter reports their participation in a Welcome Home parade for Idaho "Desert Storm" troops. Their contribution to the parade was a float consisting of the mobile



# Civil Defense Newsletter

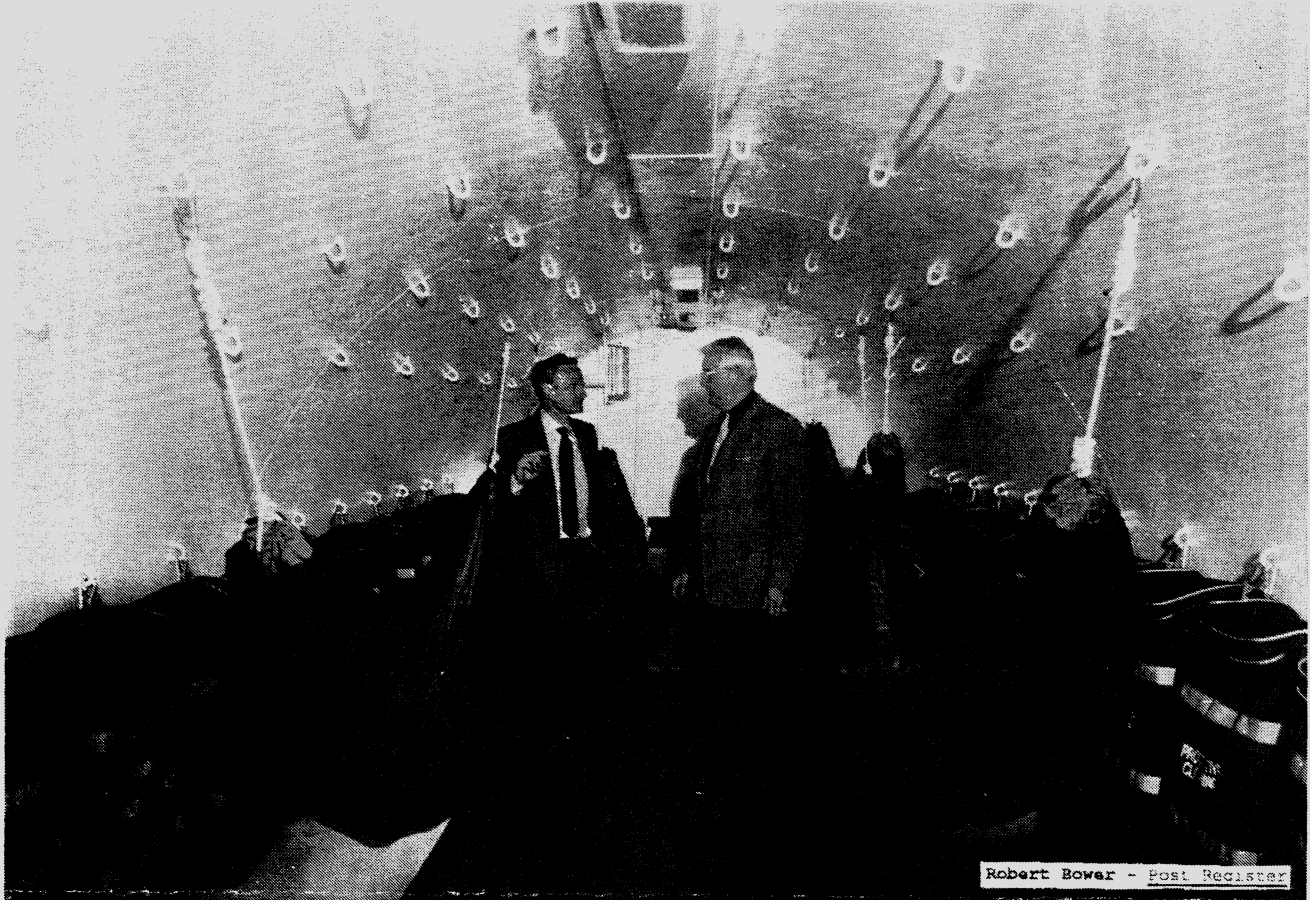
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## GET THE INSIDE STORY!



Robert Bower - Post Register

Pictured **INSIDE** Idaho's Mobile Civil Defense Shelter Exhibit above (on left) is Dr. Arthur B. Robinson, PhD, Scientist-designer who strongly advocates a "Fighting Chance" for survival of we Americans with a combination of SDI (Strategic Defense Initiative) and Civil Defense shelters. On Robinson's right is Paul G. Dougherty, State Bureau of Disaster Services Field Officer for the Southeast Idaho Area.

Dougherty pulled the 9 1/2 ft dia. x 35-ft 7-ton trailer as one of 66 entries in the Yellow Ribbon Loyalty Day Welcome Home Parade honoring Operation "Desert Storm" servicemen/women.

Old Glory flew from every lamppost along the downtown route where hundreds of old and young alike viewed the parade. Giant yellow ribbons, each with a huge yellow bow, were wrapped around the trunks of the large trees on each side of the spacious sidewalk, leading to the front steps of the Bonneville County Courthouse, where the Servicemen and Women from the War in the Gulf were honored by We the People in a Red, White and Blue extravaganza that started with A Pause for Prayer...

shelter display that Fighting Chance built for the state of Idaho. The photograph was taken from a local newspaper article. This event included speeches by influential politicians including Senator Steve Symms and Congressman Richard Stallings.

This is the sort of activity that puts civil defense technology before the American people in such a way as to have a significant effect on our national preparedness. The displays are in six states now. They need to be in the other 44 states, too. Slowly, but as fast as our resources permit, we are putting these displays where the friends of American homeland defense can put them to work.

### **VERY LONG TERM STORAGE**

The usual procedure for long-term storage of perishable items such as seeds and canned food is rotation. You simply use your supply and keep replenishing it. For example, we occasionally buy tuna fish by the case on sale at about 55 cents per can. We keep several cases of this in our family shelter as food to eat during a short term shelter stay. The shelter temperature stays about 45 degrees Fahrenheit. We gradually eat the tuna fish, so no cans in the shelter are more than one year old.

The usual methods of dry, nitrogen packed, vacuum packed, or carbon dioxide purged containers for long term storage of grain and beans have been discussed several times before in this newsletter. These, too, can be rotated, but they will store for many decades without rotation.

What about perishable and expensive items such as medicines - particularly medicines that are not routinely used, so they cannot be rotated?

Those of you who have, with a physician's cooperation, assembled the medical kit developed by Dr. Jane Orient and her colleagues at Doctors for Disaster Preparedness (and listed and recommended in this newsletter) may now be watching the expiration dates on your medicines. Some medicines become less effective with time. Some actually become dangerous with time! Moreover, protection from air by packaging does not protect many medicines from deterioration. Pills, for example, contain many chemicals in their formulations that can gradually cross-react and change the composition of their contents.

It is for this reason that we recommended that you store pure, crystalline Vitamin C. The pure substance keeps for many decades if protected from air. Vitamin C pills, however, deteriorate rapidly as the components cross-react.

There is an excellent method for very long term storage of most medicines, for seeds that will stand freezing and thawing, and for other relatively compact perishable items. The items are simply kept at a temperature so low that all chemical or biological processes of deterioration are markedly reduced. Most modern laboratories have at least one ultracold freezer. A typical model is adjustable in the range of minus 20 to minus 90 degrees Centigrade. Set at a moderate minus 70 degrees Centigrade, these freezers will usually run

many years without maintenance. The chest type is more efficient and reliable than the upright type.

In general, chemical reaction rates approximately double for each 10 degrees centigrade rise in temperature. Therefore, one can estimate that materials will deteriorate about 500 times more rapidly at plus 20 degrees Centigrade (about room temperature) than they do at minus 70 degrees. Even a factor of only 100 changes a one-year deterioration into a 100-year deterioration.

Since the exact determination of the lifetimes of perishable items is a difficult and generally unrewarding task, very little good information is available. Moreover, storage conditions vary so greatly that adjusting rates of deterioration from one location to another is unreliable. Many people are ready to give opinions, but such opinions are usually without much value.

Some things are destroyed by the freezing or the thawing process itself. Examples are bottles too full of aqueous solutions that expand and break while freezing, and living tissues that contain water, which crystallizes during freezing and kills the tissue. If, however, the item can be frozen and then immediately thawed without much damage, it can be preserved for the rest of your life in an ultracold freezer without significant deterioration.

The disadvantage is cost - primarily the cost of the freezer. A new ultracold freezer of the size of a large normal home chest type freezer retails for about \$5000 to \$6000. Small ones cost about \$3000.

It may be possible, however, for you to find one of these in the used market for a small fraction of the retail cost. Look for auctions of laboratory equipment or for liquidations of research companies or their laboratories. Although the new prices are high because these freezers are not mass-produced and because they are unusually well built, there is essentially no demand for ultracold freezers in the used market where their prices should be quite low. There are several brands. The most common is Revco. I have seen sales of new Revco freezers during the past few years at prices about 60% to 70% of retail.

If you obtain such a freezer, there are several ways in which you might use it. Consider, for example, storage of antibiotics. You could simply store the medicine in the freezer. The freezer may not, however, fit inside your shelter. It is not a good idea for all of your medical supplies to be outside of your shelter.

Alternatively, you could keep the medicine in your shelter. When the expiration date is near, buy fresh medicine and put the older medicine in the freezer. The older medicine will not deteriorate further while in the freezer. In this way you will gradually accumulate a greater supply for your unprepared community and also keep fresh supplies available in your shelter.

Finally, you might divide a large bottle of medicine into several small ones. Keep all but one of the smaller bottles in the freezer and rotate single bottles into the shelter for times shorter than the remaining deterioration time on the label.

One precaution should always be taken. Surround the items with freezer containers or other water-tight containers before placing them in the freezer. When you take something out of the freezer, let it warm up to room temperature for several hours before opening. If you open things immediately after taking them from the freezer, water from the air condenses on the contents. This can initiate rapid deterioration.

If you locate a good supply of used ultracold freezers at low prices, please let us know, so that we can pass the information on to other civil defense conscious families.

## SCIENCE AND MEDICINE

Although there is both science and medicine in civil defense, that is not the way our small, non-profit Institute received its name, the Oregon Institute of Science and Medicine. It was named to correspond to the work in nutrition, preventive medicine, and degenerative diseases and in fundamental chemistry and biochemistry that was the primary life work in which Laurelee and I and our coworkers were engaged prior to the civil defense project.

Although we had intended to continue that work in conjunction with the civil defense effort, we soon found that there were a remarkable number of unfilled needs in civil defense. As a result, our research work diminished to a low level. We did continue a small amount of scientific work. Recently, I have been publishing some of our later research.

A recently published experimental paper of ours is about a subject that may be interesting to many of the readers of this newsletter. The paper is *Quantitative Measurement of Human Physiological Age by Profiling of Body Fluids and Pattern Recognition* by Arthur B. Robinson and Laurelee R. Robinson published in the June 1991 issue of the journal, *Mechanisms of Ageing and Development*, volume 59, pages 47-67. The first four and one-half pages of that paper are reproduced below. Write to us if you would like a complete copy of this article. (The other 15 pages are somewhat technical.)

The object of this work involves the development of technological methods to measure individual health in such a way that people may lead longer and more healthful, disease free lives. With these techniques, diseases may be effectively combated even before symptoms are evident. Like civil defense, this work seeks to prevent damage to human life before it occurs. Also, like civil defense, it is applicable at low cost to all people.

I had a senior colleague once who sometimes worried about world affairs. Although we had very different thoughts about their solution, I have often remembered one comment that he made during a particularly serious world crisis: "*What is the point of working toward a better world if there isn't going to be a world?*"

There are several relevant points.

First, this is a dramatic overstatement. There will always be a world until the Lord decides to terminate it. Moreover, it will be filled with men and women doing their best to lead valuable lives. There are no technological threats today that are able to destroy the human race - especially that part of humanity that has the wisdom to employ available civil defense technology in its own protection.

Second, the statement would be better worded: *"Why should I work on research toward the improvement of human life when the threats from war and terrorism are so severe that they may cause more harm than the potential good from my research? Perhaps I can do more good by working against those threats instead."*

This wording illustrates a rarely made point about strategic defense and civil defense that alone justifies the building of both systems - even if they are never used and even if, by some method, we could know ahead of time that they will never be used.

As long as the cloud of chemical, biological, and nuclear horror released by accident, terrorism, or war hangs over our completely unprotected nation and families, many of our best and brightest people will be distracted from completely productive work by worry about these threats. Moreover, most of our people, many without even realizing that they are affected, will lead slightly less productive and less satisfying and enjoyable lives as a result of these threats.

Nor will this problem be solved by the lies and manipulations of dishonest and self-serving politicians. Many of the most productive Americans are just too smart to be fooled into thinking that they can be protected in a dangerous world by treaties with totalitarian thugs and "international agreements."

The Swiss people are secure behind their homeland defenses. They are not safe from every possible disaster, but they know that they have done their best to protect their families and their civilization from most technological threats. This leads to the peace of mind that helped them to build such a successful and productive country. Without protection like the Swiss, Americans must do their best in an atmosphere of continual uncertainty. That best will always be less than it could have been had they followed the Swiss example of homeland defense.

While endeavoring to do our best in our health research and other efforts, Laurelee and I also were worried for many years about the dangers faced by our nation. When we started to work on civil defense, we found a more peaceful frame of mind, because we were now working toward the solution of this problem that had worried us for so long.

We hoped to contribute to both health research and American defenses.

Unfortunately, so few people are working effectively toward civil defense that we soon found ourselves confronted by the problem illustrated by the well-known saying that President Reagan kept displayed on his desk in the White House:

## QUANTITATIVE MEASUREMENT OF HUMAN PHYSIOLOGICAL AGE BY PROFILING OF BODY FLUIDS AND PATTERN RECOGNITION

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(Received November 9th, 1990)

### SUMMARY

Quantitative correlations with human age are demonstrated for 60 substances from a group of 200 substances measured in the urine of 235 men. Simplified pattern recognition calculations are used to combine these correlations into patterns of human age and to demonstrate their utility for the quantitative measurement of human physiological age and aging rate.

The empirical use of these techniques for the extension of human life-span and diminution of human suffering from degenerative diseases is discussed. Current experimental limitations of this method are demonstrated and evaluated. The application of these techniques can form the basis for a significant advance in the quality of human life.

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*Key words:* Aging; Human; Analysis; Pattern; Urine; Quantitative

There are many hypotheses regarding the primary cause of the observed intrinsic life span of organisms [1—10]. It is to be expected that the eventual resolution of this unsolved problem in molecular biology will lead to methods of altering the primary causes of aging and thereby the life span of organisms including humans.

These alterations may be expected to be of the two types illustrated in Figs. 1—3 [11]. First, the death rate of humans during the years much earlier than their intrinsic life span will be reduced. Second, the intrinsic life span itself will be increased.

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\*Laurelee Robinson died on November 12, 1988. She saw and approved all of the figures and tables in this paper. She did not read the final manuscript.

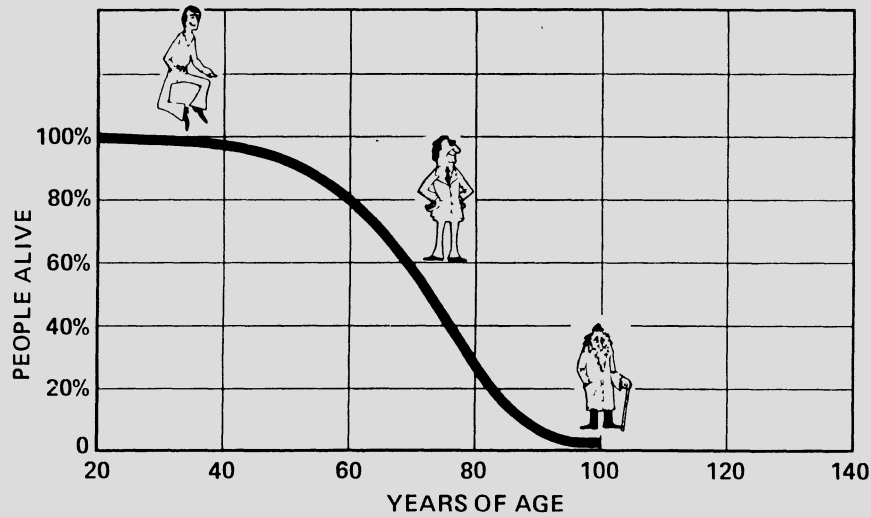


Fig. 1. Aging curve for a population comprised of American males as calculated from life expectancy compilations of the U.S. Public Health Service. This figure is reproduced from Robinson, A.B., *Mech. Ageing Dev.*, 9 (1979) 225.

It should, however, be possible to extend human life spans by means of empirical experimentation even prior to the advent of a thorough understanding of the molecular biology of human aging. Observations of animals and humans suggest that substantial progress of the type illustrated in Fig. 2 and modest progress of the type illustrated in Fig. 3 should be possible.

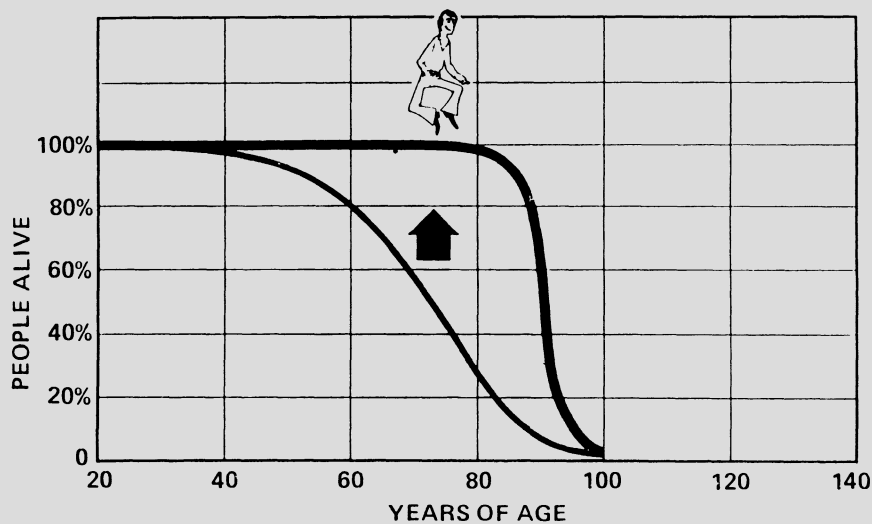


Fig. 2. Example of a change in the human aging curve through improvements in diet and other living conditions, but with no change in intrinsic life span. This figure is reproduced from Robinson, A.B., *Mech. Ageing Dev.*, 9 (1979) 225.

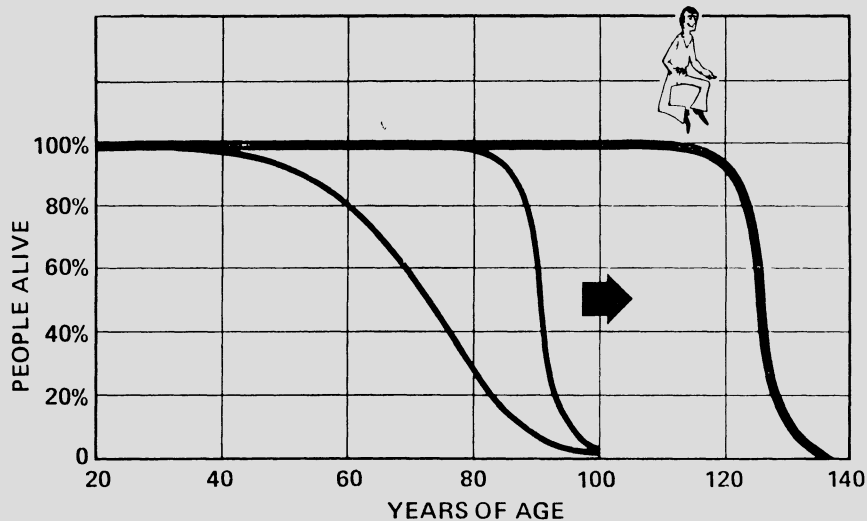


Fig. 3. Example of a change in the human aging curve through improvements in diet and other living conditions and through an increase in the intrinsic life span. This figure is reproduced from Robinson, A.B., *Mech. Ageing Dev.*, 9 (1979) 225.

The principal impediment to this empirical progress is the fact that the humans carrying out the experiments have life spans of comparable length to those of the human subjects which they are studying. If carried to completion, a single rigorous experiment on human life span as a function of, for example, diet or environment

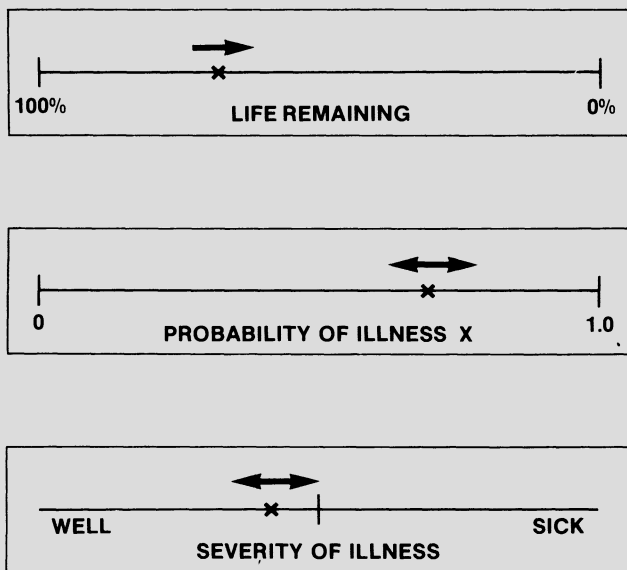


Fig. 4. Representative axes of physiological age, probability of a specific illness, and the severity of a specific illness. It is the quantitative determination of the positions on these axes of specific individual humans, by means that are low cost and generally applicable to all well individuals at frequent intervals, which is the goal of our work on the physiological profiling of human body fluids.

could require as much as 50 to 80 years. Even if this is reduced to 10 to 20 years in some cases by clever experimental design, a complete series of experiments will still proceed too slowly to be of benefit to humans who are now living. In the absence of real progress and as a result of the understandably high human interest in this subject, many sensible but unproved aging hypotheses have given rise to fads and cults especially as pertain to diet.

The impediment to human aging research of long experiment times would be removed if an objective and *quantitative* means for determining human physiological age with reasonable accuracy could be developed. This would allow empirical experiments on aging *rate* to be carried out with experiment times in groups of humans of a few months per experiment or less.

Moreover, quantitative analysis of human age would allow the monitoring of the rate of aging in single individuals, so that biochemical individuality and individuality of particular environmental circumstances could be taken into account in devising conditions that minimize the rate of aging in each individual.

We have long been interested in the development of a procedure for the quantitative measurement of human physiological age [11—14]. This interest has been a part of our general interest in the quantitative measurement of human health especially with respect to degenerative disease. If by means of inexpensive quantitative analysis the state of each person could be determined on quantitative axes as illustrated in Fig. 4, then their productive and actual life spans could be extended; their illnesses could be more effectively cured; and their health could be guarded by preventive measures which combat the probability of disease rather than disease itself.

It is an essential obligation of scientists to do all that they can to optimize the quality of all human life. This optimization requires, in part, the minimization of disease and the maximization of life span for the entire human population. Techniques of the sort illustrated in Fig. 5 and discussed below have substantial potential to meet these parts of that obligation.

We have limited ourselves to those techniques which have potential, in mass application, to quantitatively measure the amounts of a large number of substances in human body fluids at a cost of about \$ 10 or less for an entire analysis including its computerized interpretation. This limitation assures that the techniques developed will be available to most people rather than a wealthy few. Having measured within this restriction as many parameters as possible, we then have attempted to extract as much information from these measurements as possible by simple computerized pattern recognition techniques.

This is a departure from the usual approach of developing observational techniques for those substances thought to be of importance to a particular hypothesis or theory. Fundamental science is more entertaining. We have, in our work on deamidation and molecular clocks [10,11], enjoyed this, too. In fact, a side benefit of the profiling work has been the discovery of a few correlations which happen by

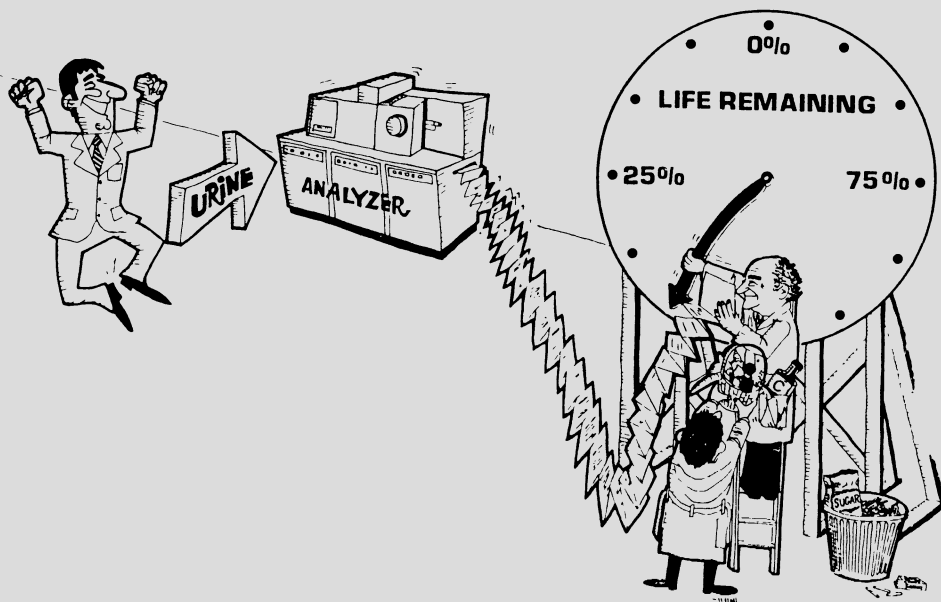


Fig. 5. One aspect of the optimization of the quality of human life.

chance to be relevant to basic research. Nevertheless, choice of substances by economics and simplicity of analysis rather than by hypothesis is an essential part of rapid progress in the practical profiling of human health.

Our work has comprised the use of ion-exchange chromatography, gas-liquid chromatography, and direct mass spectrometry, including chemical ionization and field ion mass spectrometry (without chromatographic separation), of samples of urine, blood, and breath from humans and mice. We also have carried out some work on the whole body compositions of fruit flies [12].

*"If not us, who? If not now, when?"*

If we didn't publish *Nuclear War Survival Skills*, make the 15 civil defense video tapes, write the legislation and platform plank, build the mobile shelter displays, etc., who would?

The lonely answer to that question as each need arose caused us to do more than was prudent for us personally and also caused us to set aside almost entirely our health research work.

This recently published paper has attracted the interest of some men who have suggested the establishment of a profit-making corporation with the goal of delivering our metabolic profiling technique as an improvement to the current health care system. If they find sufficient investors, they intend to proceed. I hope that they are successful.

I wish that America today had a civil defense and a strategic defense. If she did, then our family would once again be free to work entirely on other positive aspects of both science and medicine.