

NUCLEAR ARMS

The Current Situation

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Looking objectively at the state of the nuclear confrontation and the risks of a nuclear war breaking out, the prospects are gloomy. Arms control negotiations are at a standstill. The United States and the Soviet Union are adding daily to their nuclear weapons stockpiles. The numbers are now so high that they have no real meaning regarding the damage they can do; a fraction of the total could create such devastating consequences that civilization as we know it would be ended.

A special concern is that both countries are acquiring strategic nuclear weapons delivery systems which make nuclear war more likely. These systems provide incentives for each side to launch first in a preemptive strike. Such capabilities threaten to undermine the strategy of deterrence for both sides. We may not like the psychology of having to depend on deterrence, but we have to live with nuclear weapons—and the only situation which makes sense is when mutual deterrence is stable. Because of their destructive nature, nuclear weapons can serve no military purpose; they can be used only to deter the other side from using its weapons.

A major danger of first-strike weapons is that they are only useful if you want to use them first! They encourage both sides to adopt a

posture of "launch-on-warning" or "launch-under-attack," which means that when one side's computers detect a launch from the other side, it automatically launches its missiles so it won't be destroyed. This may seem to be a sure way of protecting the missiles, but, in effect, this strategy has to short-circuit virtually the whole command and control structure and to rely solely on computers.

The United States' procurement of the MX missile may lead the Soviets to adopt this dangerous posture. President Reagan said recently that he wants the MX as quickly as possible. To have, what he called, a prompt threat to Soviet ICBMs in their silos. That prompt threat from those MX missiles is so prompt that it is only a threat if we launch them in a first strike. The Soviet Union, of course, knows that; what we are doing with the MX program is to push the Soviets into a position where they will adopt a launch-on-warning posture.

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I don't want my security or the security of this country or the security of the world to depend on whether the United States' computers work properly and don't give false alarms, and the last thing in the world that I want is to have

everyone's security depend on whether or not Soviet computers work correctly. However, that is the kind of position that we are pushing the world into today—a posture in which computers may decide the fate of the world, rather than, at least, leaving it to mankind with all its foibles.

The Arms Race: Its Beginnings

First, let us look at a little history to see how we got ourselves into this position. Briefly, one should remember that, in 1945, we had a monopoly on nuclear weapons—and we used two of them.

From my point of view, the important thing was that we had that monopoly through most of the 1940s—the Soviets did not test a nuclear weapon until 1949. In the 1950s, we saw that both sides were not satisfied with the puny 15-kiloton weapons which destroyed Hiroshima, so we both moved into the hydrogen bomb era—where the explosive yield of the new weapon was a thousand times as great as that which wiped out, in essence, the cities of Hiroshima and Nagasaki.

Furthermore, not only did we put greater explosive power in nuclear warheads; we also started to develop new kinds of delivery systems. The United States moved forward quickly on bomber delivery systems, and a little slower regarding missiles. This delay, in the long run, aided our security. The Soviets, on the other hand, essentially bypassed the development of modern bombers and went to intercontinental missiles.

They tested an ICBM before we did, and it looked as though it was a reliable missile which they could deploy.

In the 1950s, we didn't have any satellites which could take pictures of the entire Soviet Union, and so our intelligence, without being able to prove it, believed that the Soviets had developed a reliable ICBM and had deployed at least a small number of them. Of course, the Air Force said there were hundreds, and we in the CIA were saying a much more modest number, but there wasn't much argument that some deployment was going forward.

It wasn't until the end of 1960, when we started to get satellite coverage of the entire Soviet Union, that we realized that the Soviets had never even deployed their first-generation ICBM—or at least no more than a handful of their first-generation missiles. In the meantime, we had already reacted to what we thought was a missile gap and had gone ahead with extensive programs for developing both land-based and submarine-based ICBMs. The land-based ICBMs were put in hardened silos; so we sat with a relatively large, highly survivable deterrent strategic force. Because of aiming inaccuracies, there was no risk to that force—no matter what the Soviets did. There was no chance that they could gain anything by trying to launch a first strike against it. Then, of course, the Soviet Union came tagging along behind us. By the end of the 1960s, they had also built up an approximately equal strategic deterrent force, which was also invulnerable.

Actually, for a long time before the end of the 1960s, neither country had the kind of forces that could contemplate a first strike. But, by the end of that decade, there was no question that we were in a position of mutual deterrence. So, at that point, both nations turned to arms control.

The Arms Race: Rushing Ahead

The ABM Treaty was signed in 1972. That should have put a cap on the arms race because it guaranteed that both countries would have a survivable deterrence posture for the foreseeable future. However, it was at that point that both sides went astray. Instead of profiting from the relatively stable, mutual deterrence situation which we had in 1972, both superpowers went ahead and procured more weapons with greater aim accuracies. Now one hears claims all the time that the Russians are to blame for the arms race since 1972 and that we didn't do anything after SALT I because we just relied on arms control for our security. Frankly, nothing could be further from the truth. The United States has to take its share of the responsibility for the continued arms race, which moved in very dangerous directions in the 1970s.

The United States took the lead in the two most destabilizing developments of that decade. One was to develop and deploy Multiple Independently Targeted Reentry Vehicles—MIRVs—which are multiple warheads on a single missile. Each warhead has a separate guidance system so that it can be aimed at separate targets. MIRVs revolutionized the whole strategic balance. For the first time there was the potential for one missile, if it was fired first, to be able to destroy several missiles on the other side. We had created a system which gave an advantage to using nuclear weapons first. This was an extremely dangerous development because what we should have been doing then and should continue to do now is try to create situations where there is no advantage to going first!

There may have been some opportunity for getting MIRVs under control in SALT I, but the US

government, after a lot of debate, decided to race the Soviets in MIRV development. We went ahead with our MIRV deployments, and as might have been predicted, the Soviet Union came along five years behind us and also deployed MIRVs. Thus, we moved into a situation where both sides had increased the incentives for initiating a nuclear attack.

The second significant US weapons development in the 1970s is directly related to MIRVs; it was the development of more advanced guidance systems for MIRVed warheads, so that each one would have at least a high theoretical probability of being able to destroy a missile silo of the other side. I would stress the term "theoretical," because I don't think this is a real-life capability, but with this development came the culmination of the threat to the land-based portion of the deterrent posture of both sides. In our case, this was not a great disaster, in spite of what you might gather from the press, because in the 1960s and 1970s we had made the proper decision to put only 25 percent of our forces into land-based missiles which were becoming theoretically vulnerable.

However, the Soviet Union put 75 percent of their efforts into land-based missiles, which were becoming vulnerable to our advanced guidance systems. And, as might be expected, the Soviets got better guidance systems, too, so all these technological improvements did was raise the level of the arms race to another more dangerous level. That is the situation in which we see ourselves today. Both sides are deploying, or have deployed, weapons which have theoretical capability of destroying at least the ICBM portion of the deterrent, and, as I said, this is a much more serious problem for the Soviet Union than it is for the United States.



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That gets to one point which is relevant to the role academia can play in teaching about nuclear-war issues. Today there is a tremendous amount of nonsense passed out about the nature and danger of the Soviet threat. Our politicians have learned over the years that the most effective way of getting money for new weapons is to say that the Russians have better weapons and are about to attack us. They ignore completely what actual security significance those weapons have. For example, even if the Soviets had been first in getting weapons which threatened ICBMs, which they weren't, that is still no reason why we should copy them. By copying them and getting a first-strike capability of our own, we are only providing them with targets and incentives to actually use their weapons. It would be much better

for the United States not to have any weapons like that at all; then the Soviets would just have wasted their technological talents in getting this capability.

This concept of a "weak" United States is used to sell the Congress and the public on buying more weapons. To say that the United States is nuclearly weak, has a vulnerable strategic force—and I have heard the Secretary of Defense say this—and that we don't have a secure deterrent against a Soviet attack, I find to be very dangerous. It is essentially playing the Soviet propaganda line, and there is absolutely no truth to this whatsoever. The United States has a much more survivable strategic deterrent force than does the Soviet Union. Granted, both sides' land-based ICBMs may be vulnerable, but we have a much better-balanced force. You never hear about the good sides of our force, only about the bad sides. At all times we have submarines out in the ocean that

carry about 3,000 warheads, each of which has a yield three times greater than that of the Hiroshima bomb. They can destroy military targets as well as cities. The only thing that they can't do is destroy missile silos, and that, in my view, is a very good characteristic rather than a bad one.

Therefore, any notion that the United States is weak is just plain misleading and does us a lot of harm. Yet, it is probably the most flamboyant fuel that exists to keep the arms race escalating. It is important that a rational view of the nature of the Soviet threat be taken and that the American public understands that there is no evidence available to suggest that today the Soviets have any incentive to launch a first strike. However, if current trends prevail, the US might push them to the wall in some kind of a situation where they feel so threatened that they might lash out and decide that it is better to launch their weapons than to run the risk that we would launch ours first.

The Arms Race: Its European Situation

What we see now in Europe is the United States pressing its allies to deploy cruise missiles—most importantly, Pershing II missiles in West Germany. Now, Pershing II missiles have several, very dangerous characteristics. These are ballistic missiles with such highly accurate guidance systems that they can threaten even the hardest targets, including command control centers and missile silos. Also, they can probably reach Moscow in a matter of minutes. You can argue a bit about whether their nominal 1,000-mile range really will hit the Kremlin or the suburbs, but from the Soviet point of view, they certainly look as though they could hit the Soviet capital.

Pershing IIs present a very direct threat to the entire Soviet political and military command-and-control structure, but they cannot be made survivable. Thus, we have this vulnerable target—which is a sort of Damocles Sword—hanging over the heads of the Soviet political and military command. Now, visualize a situation like Poland and East Germany, where there might be skirmishes across the border: the Soviet Union could be faced with a problem of actually using its forces to try and contain the internal problems. However, before it fires a single shot or moves a single soldier, it would be under strong pressure to destroy the Pershings in West Germany; then we are off to the races with a nuclear war! Nobody would know how to contain it or keep it limited.

The Arms Race: The Public Speaks

The final point—after all this pessimism—is that I feel much more optimistic today than I did six months ago because, at last, the public is being heard. It has already been heard in Europe. The fears about the deployment of these weapons in Western Europe, together with some of the statements about fighting “limited” wars—which are limited to Europe—haven’t gone over very well. The anti-nuclear movement in Europe is not, as some people would have you believe, just composed of Communist-inspired groups; it is a very broad anti-nuclear-war movement that has already demonstrated political clout. With the possible exception of Great Britain, no other government can afford to neglect that pressure from the people to try to stop this mad nuclear arms race. That pressure had been transported across the waters

to the United States by political leaders in Europe and is the reason we have the only arms-control negotiations going on today—the Geneva talks on intermediate-range weapons.

To date, there has been no real interest by the present administration in trying to use arms control as a method of controlling the nuclear threat. The only evidence was the agreement to start the negotiations on European-theater weapons. At that time, both presidents Reagan and Brezhnev set forth extreme starting positions.

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These are all right if they are used as a start for negotiations and a basis to work seriously toward an agreement; however, they are of no value if they are “take-it-or-leave-it” positions. We should worry if we are negotiating in Geneva on a take-it-or-leave-it basis. If so, we might as well write those negotiations off.

Unfortunately, we have seen nothing in terms of negotiations on intercontinental systems. Perhaps, soon, there may be some statement about starting such negotiations—restarting START instead of SALT—but three years have already been lost in terms of negotiating time, counting the year we tried to get the SALT II Treaty ratified. We simply cannot afford that kind of time scale. Weapons development does not stop while negotiations are in recess—or even while they are in process. What we are seeing is that every day the situation is becoming harder to control and more dangerous, yet we don’t seem to be taking any steps to face up to this threat.

In the last year, or so, there has been a tremendous ballooning of US public concern about nuclear war.

This is certainly a hopeful sign, because without it we are never going to control this race. All of the careful studies and preparations for SALT or START agreements are not going to solve the problem. What is going to stop the problem—and get it addressed seriously—is public understanding of what the issues are. If people cannot understand the basic issues, then they will leave it to the experts, and this is not a problem to be left to the experts. This is a problem which the public can understand, with a little bit of help in stripping away some of the nonsense it is always encumbered with. The MX issue was one where the public studied the issue and translated its views into political action. Fostering sensible public education about arms control and nuclear-war issues is the task that educators should address themselves to. I can’t think of a more important one that we in this country have to face today.

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