

# The Cold War Arms Race

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## Diplomacy with the A Bomb (1945-1949)

Many have argued the case that the dropping of the Bomb on Hiroshima and Nagasaki was not about ending the War against Japan as they were on the verge of surrender anyway, but rather it was a, “show of force intended to impress the Soviets and warn them not to overrun Eastern Europe”. (Weisgall) “As P.M.S Blakett, the Nobel Prize winning physicist, suggested, “The dropping of the atomic bombs was not so much the last military act of the second world war, as the first major operation of the cold diplomatic war with Russia”. (Weisgall)

Truman is said to have made the comment at Potsdam, “I’ll have a hammer on these boys” suggesting that he will have the upper hand in negotiations thanks to the atomic bomb.

Churchill, during his Iron Curtain speech, weighed into the debate by stating that it would be wrong to, “entrust the secret knowledge or experience of the atomic bomb” to the United Nations, and it would constitute, “criminal madness to cast it adrift in this still agitated and un-united world”.

The American Joint Chief’s, described the atomic bomb as, “one military weapon which may for the period until Russia obtains it exert a deterrent effect up her will to expand”. (Weisgall)

The U.S. atomic advantage and the belief that they could achieve victory over Russia if a war ensued “meant that they immediately acquired an aura of decisiveness, whether warranted or not”. (Freedman).

After the U.S had made a number of Nuclear Bombs they offered to allow the United Nations to take control of Nuclear energy, however, the Russians new that the if this happened the Americans would never give up the bombs they had already made and as such they would have the upper hand in Nuclear Weaponry so the Russians were not keen on this happening.

Ultimately the fear of the A Bomb didn’t deter the Russians from continuing their aggressive attitude and expansionist tendencies. Their refusal to back down on Poland, the Berlin Blockade and their treatment of East Germany all point to the fact that Russia was concerned but not cowering in the face of the Atomic Bomb threat.

One thing that the onset of the A Bomb did do for the Russians is make them extremely eager to produce their own A bomb. In January 1946, “Stalin made it clear that the atom bomb project was of urgent concern and should proceed expeditiously without regard for cost. Stalin trebled the science budget for the year”. (Isaacs)

*Significance:* The most significant aspect of this stage of the arms race was the confidence it gave to the US in their bargaining with the Soviets. It made them more decisive and far less willing to negotiate. Interestingly though, it didn't have as significant an impact on the USSR and they did not back down on major issues.

### **The Russians develop the A Bomb (1949)**

"The prospect of a two sided atomic war", said Raymond Moley in Newsweek, meant a "towering change in the world outlook".

The impact of the Russian development of the bomb was, "a grim determination to increase America's lead in nuclear weaponry" (Boyer, Paul). There were those who had been opposed to nuclear weapons and the destruction that they could cause but those arguments became dim in the light of the Russians ability to use nuclear weapons.

With the Russian bomb came a shift from seeing the bomb as a terrible scourge to be eliminated as quickly as possible to being a winning weapon which must be stockpiled with utmost urgency (Boyer, P)

"With the bomb now in the hands of 'totalitarians... remorselessly driven toward war', said Life magazine, America must maintain a 'clear, unchallenged, demonstrable' nuclear supremacy" (Boyer, P.)

"The Hearst press urged the stockpiling of four atomic bombs for every Soviet one".

Stockpiling, however, wasn't the only idea on the agenda for getting ahead in the nuclear arms race. There had been whisperings since the bombs were dropped on Japan of a bomb 1000 times bigger than those. The onset of the Russian bomb created the urgency to take this idea from theory into practice. This led to the development of the Hydrogen bomb.

*Significance:* The significance of this era was the way it motivated the US towards both stockpiling and development of the H bomb. No longer was the debate over whether or not to make more atomic bombs an issue, there was a new urgency to have more and to have better ones. It did not significantly change Soviet negotiation style or make them more aggressive since they were clearly still behind in the arms race. It did, however, push Khrushchev toward his belief in 'peaceful co-existence' since both sides now possessed the weaponry to reap mass destruction on the other.

### **The H Bomb (1952)**

As mentioned earlier, the development by the Russians of the Atomic Bomb led to the development of the Hydrogen Bomb, a bomb roughly 1000 times more powerful than the bombs dropped on Hiroshima and Nagasaki.

There was debate among scientists regarding whether or not to develop the H Bomb. Robert Oppenheimer believed it was wrong to develop such a bomb in peacetime while there was no identifiable need for it... he described it as, "a danger to humanity as a whole". Other scientists such as Edward Teller argued that the Americans needed to push ahead in the race otherwise the American people would be left vulnerable to Soviet Arms superiority. (Jeremy Isaacs).

There was no public debate on the issue of the H Bomb in America and after some White House discussion Truman stated, "what the hell are we waiting for? Let's get on with it". He told his press secretary that although no one wanted to use such a bomb, it was essential to have it in bargaining with the Soviets. (Jeremy Isaacs)

The first H Bomb was tested at Eniwetok, a tiny atoll in the Pacific. The atoll was completely destroyed in the explosion which left a crater 1 mile wide and two hundred feet deep.

One of the major problems at this stage was the need for a massive refrigeration device to keep the bomb cool. It was far too big for any bomber to carry.

Nine months later, 12 Aug 1953, the Soviets tested their first thermonuclear bomb. Although it was smaller, the US detected the use of Lithium which meant that they did not need the huge refrigeration units and could probably carry these bombs in their heavy bombers. It appeared as if the USSR had taken the lead in the nuclear arms race. (Jeremy Isaacs)

*Significance:* The main significance of the H bomb was that it encouraged Khrushchev toward his belief in 'peaceful co-existence' since both sides now possessed the weaponry to reap mass destruction on the other. This would then have a negative impact on Sino-Soviet relations

### **Further Developments – 1950's**

During the 1950s the US developed ICBM's – intercontinental ballistic missiles – these had a range of around 6000kms.

By 1960 they had developed the Polaris submarine which was capable of launching nuclear missiles while still submerged. These submarines could get very close to the Soviet Union. These became known as SLBM's – submarine launched ballistic missiles.

By the beginning of the 1960's the US had a huge nuclear supremacy with their 'triad' system of long range bombers, ICBMs and SLBMs.

*Significance:* The inability of the Soviets to keep up with US technology meant they tried other ways to make the US feel nervous. They claimed to have much greater power than they actually had and a real fear developed in the US of a missile gap between them and the Soviets (personally I'd put money on this idea being pushed by the military-industrial complex so that they would get more funding to make more weapons but ignore me).

## **The Space Race**

The space race was far more about bragging rights and the impression it made on public opinion than about having a genuine advantage in militaristic terms. On 4<sup>th</sup> October 1957 the USSR launched the artificial satellite, Sputnik 1. It circled the globe every 92 minutes and gave off a beeping signal to the world. Sputnik's battery only lasted a few weeks but the message it sent was loud and clear (metaphorically speaking). Sputnik marked the beginning of the space race and the Soviets were clearly leading (Briggs, 2005. P. 47). It made the point to the world that Communism could lead in achievements. This also came at a time when the Soviets were struggling militarily, economically and politically in the eyes of their fellow communists, thereby allowing them to reassert their authority on the communist world. The Soviet press was initially restrained in speaking of this achievement but soon began to boast openly the Pravda (the official Soviet newspaper) saying, "Even the capitalist press has been forced to admit the superiorities of the Soviet system..." (Briggs, 2005. P. 48).

The U.S. Navy attempted to launch the Vanguard satellite in December 1957 but this failed miserably and was soon labelled by the U.S. press, the 'stayputnik'. The Sputnik had been launched into space by the Soviets ICBM missiles which the Soviets had successfully tested over a distance of 5000 kilometres. Although the Soviets were clearly lagging behind in terms of nuclear technology, Khrushchev exploited the fear that atomic missiles could be placed on the ICBM's and sent to destroy most Western Cities (Briggs, 2005. P. 48).

Eisenhower was not panicked by this talk (partly because he had been sending U2 spy planes over Russia since 1955 and knew they were exaggerating) and though he increased spending on missiles to a degree he was committed to ensuring the U.S. economy was not ruined by overspending on weapons that were not yet necessary. Eisenhower was also able to place Thor and Jupiter intermediate ballistic missiles in allied countries close enough to the Soviets to ensure the U.S. still held a military advantage. Despite this, one big consequence for Eisenhower was that he was damaged politically by the belief in the public that there was a severe 'missile gap' between them and the Soviets.

In May 1961, Alan Shepher Jr. was put into space and in February 1962, John Glenn Jr. was the first American to orbit the earth. Kennedy had stated in May 1961 his desire to put a man on the moon within a decade and soon after, the Apollo program began.

*Significance:* The initial significance of the space race was the propaganda victory that it provided for the Soviets and the moral loss for the US. It certainly began a massive funding of space programs on both sides but given the superior US economy they were the ones who would benefit most from this new push towards space warfare. None of this would have a major impact until SDI at the beginning of the 1980's

### **Further developments – 1960's**

The British, French and Chinese all became nuclear powers once again promoting the idea of a multipolar world rather than a bipolar one.

1966 – the US got MRVs (multiple Re-entry Vehicles) and the Soviets got them a year later

1967 – the US developed the ABM – anti ballistic missile and the Soviets had them in 1972.

1968 – the Soviets had SLBMs

1970 – the US got MIRVs (multiple independently targeted re-entry vehicles) Soviets got them in 1975.

*Significance:* This build up of strength on both sides led to the belief in the idea of Mutually Assured Destruction (MAD) where neither side would really attack the other without the assurance that they would be destroyed themselves. This acted as a strong deterrent to any nuclear threats. However, the ABM brought about the fear that perhaps one side could win a nuclear war.

### **Strategic Defensive Initiative**

The SDI – Strategic Defence Initiative – was a system that proposed the use of satellite technology to fire powerful lasers from space at any incoming missiles headed for the US. The price tag was 1.5 Trillion dollars over five years. Reagan received much criticism at the time due the unproven nature of the technology. Weisner, former presidential scientific advisor stated, “a defence system that would knock out 90 or 95 per cent would be a miracle – and the remaining 5 or 10 per cent would be enough to totally destroy civilisation”. If it was a bluff by Reagan it was a very expensive one and the Soviets could not afford to take it lightly, therefore it had a major impact on cold war relations from this point on. We can see those impacts militarily, economically and politically though all three of these are closely linked.

Militarily, it had the potential to render obsolete all the nuclear missiles that the USSR had stockpiled over the course of the Cold War and give the US the ability to win a nuclear war. "Reagan's Strategic Defence Initiative (SDI) posed a severe challenge because it threatened to make obsolete an entire generation of Soviet nuclear weapons". This was a significant change to the MAD policy where mutually assured destruction meant neither side was willing to begin a nuclear exchange.

Economically, the Soviet economy was struggling and could not keep up with the US economy. SDI could be considered a form of economic warfare – if the Soviets did try to keep up with the US, it would most likely cripple their economy and the US could win the Cold War by pushing the Soviets to the point where they self destruct. Pushing the arms race at this point will, "help to cripple the less robust Soviet economy, ultimately bringing about the collapse of the Soviet system from within" (McMahon, 1984).

Therefore, with a struggling economy and the threat of losing the power of their nuclear missiles – the Soviets would have to rethink their political cold war strategy. Politically, SDI threatened to leave them in a position where they had very little bargaining power.

*Significance:* The significance of SDI depends on your view of Gorbachev. Some believe that Gorbachev was pursuing peace from the beginning of his time in office and the refusal of the US to back down on SDI slowed down his attempts to create peace. Others believe that the pressure of SDI was one of the key aspects in forcing Gorbachev to push for peace with the US. Certainly SDI was a sticking point that stopped a major arms agreement happening when the two met in Reykjavik, Iceland.

### **Disarmament agreements 1987–1991**

- INF – December 1987 (intermediate-range nuclear Forces) - All ground-launched missiles with a range of 500-5500 kms to be verifiably destroyed. Further missiles destroyed over the next 3 years.
- Conventional Forces in Europe Treaty – November 1990 - put a limit on the amount of military hardware each side could have.
- START – 1991 (STrategic Arms Reduction Treaty) - Neither side allowed more than 6000 nuclear warheads. Neither side allowed more than 1600 ICBMs/SLBMs and Bombers. (The implementation of this would take some time)

Both sides had good reason to want to employ arms reduction, however, it should be kept in mind that there will always be an element inside each country that wants to build up arms. In the USA it was referred to as the Military-Industrial complex, a group of companies who got filthy rich from making and selling arms. A similar thing existed in the Soviet Union. **The Soviet Union** - would, in theory, gain significantly from arms reduction. For Gorbachev, a reduction in arms spending would allow an injection of funds to get perestroika working and generally improve the failing Soviet economy.