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Unnecessary Expenditures: The Cold War and the B1 and B2 Bombers

In the years immediately following World War II, much of Western Europe was in ruins economically, while two nations on opposite sides of the world, the United States and the Soviet Union, after a brief period of recovery, were in relatively strong economic positions. The state of the world at this time, with many nations left vulnerable, presented both with the opportunity to expand their influence and power globally. Both nations, however, had very different economic, political, and social systems, and neither one was willing to let the rest of the world inherit the other's ideologies.

As both countries sought influential expansion, there arose a tension between the two, at first just ideological. The United States implemented a policy of providing economic assistance to many of the ruined countries of Western Europe, while the Soviet Union patronized communist revolutions in neighboring countries. These tensions soon took a militaristic turn, when the Soviet Union successfully tested an atomic bomb in 1949. The United States and the USSR, two nations competing for global superpower status, were now the only two nations armed with weapons capable of devastating nations.

The United States quickly formed a military alliance with eleven other nations, including France, the United Kingdom, and Norway, called the North Atlantic Treaty Organization. In 1955 the Soviet Union responded by forming a similar alliance with the Warsaw Pact, which allied it with Eastern European nations including Poland, Czechoslovakia, and East Germany. With their spheres of influence expanding, both nations began to stock up on nuclear arms, prepared to defend themselves against their only true threat to the expansion of their power: each other.

As tensions between the United States and the Soviet Union began to escalate and take on an increasingly militaristic nature, the United States' Strategic Air Command began to keep one third of all of its bomber fleet on alert at all times. Eventually, the fear of the military threat posed by the Soviet Union led to the United States Air Force to adopt a policy of keeping nuclear-armed aircraft patrolling the skies at all times. While this was no doubt an expensive and resource-consuming effort, it was one that seemed necessary for the sake of national defense.

In fact, this military tactic was just one piece of a greater national defense policy the USSR and U.S. forced each other to adopt, known as mutually assured destruction. The basic principle of mutually assured destruction was that, with each nation possessing nuclear armaments, neither could ever truly defeat the other, as an attack by one would result in an almost guaranteed, equally devastating attack by the other. This state of relations led both nations to spend the entirety of the Cold War pouring funding into both offensive and defensive military

systems. This seemed to be the only way each nation could ensure that the other would never have such a technological advantage that it could safely launch a nuclear attack.

Many military minds in the United States believed that the nation's military needed to maintain diversity in its methods of delivering nuclear weapons in order to maintain the policy of nuclear deterrence as a viable national defense strategy. In doing so, the United States equipped itself what became known as the nuclear triad: a collection of nuclear intercontinental ballistic missiles (ICBMs), nuclear-armed submarines, and planes all on constant alert, which ensured that the U.S. would have a means of retaliating to any attack the Soviets could possibly launch.

To maintain this nuclear triad, the United States Air Force needed to ensure that its planes were actually capable of delivering nuclear payloads to the Soviet Union. Around the time the Strategic Air Command put its bomber fleet on high alert, the Air Force determined that its current go-to plane for patrolling international airspace, the B-52 bomber, would not remain viable as a vehicle for nuclear-deterrence. A new plane was commissioned, known as the B-70 Valkyrie, a supersonic, high-altitude bomber whose speed would make it essentially unstoppable by conventional interceptor aircraft.

It appeared as though a solution had been reached, until 1960 when an American U2 spy plane was shot down in Soviet airspace by an air-to-surface missile. This revealed significant advancements in Soviet radar and anti-aircraft defense technology, which was now particularly threatening to high-altitude aircraft. It was instantly made clear that the Valkyrie, being designed specifically for high-altitude applications, was now far too vulnerable to be used as a nuclear deterrence aircraft. Along with the usefulness of the plane itself, the United States had lost the significant amounts of money and time it had invested in the development of the Valkyrie due to its inability to anticipate its enemy's technological advances.

Once again, the Air Force needed to conduct research to determine what the alleged B-52 replacement would require. It was determined that the ideal nuclear bomber would be a "low-altitude penetrator" – a plane that could fly at low enough altitudes to utilize a technique called "terrain masking", where it would use its surrounding environment to shield itself from radar. It was also necessary for this aircraft to have an unrefueled range of at least 5,000 miles, to make sustained international missions possible. The research began in 1961 with the Subsonic Low Altitude Bomber program. However, the actual plane that would eventually result from this investigation was not commissioned until almost a decade later, in 1970. In the intervening years, the Air Force would go through four more design studies, the last of which, the Advanced Manner Strategic Aircraft study (AMSA), was given the appropriate moniker "America's Most Studied Aircraft."

In addition to the countless lengthy studies undertaken in the design of this new bomber, development was also significantly delayed by the internal politics of the United States government. There was a large amount of disagreement between politicians over the value of investing significant sums of money and resources into the development of a completely new aircraft. Those opposed to the development of a new bomber argued that the B-52, which had been repurposed to act as a low-altitude penetrator, was effective enough as a strategic bomber

that a replacement was not warranted, especially given the excessive costs of developing a completely new aircraft. Complemented by America's ready supply of ICBMs and submarine-launched nuclear missiles, the U.S. would have more than enough offensive capabilities to keep nuclear deterrence alive, they argued. However, in spite of the associated costs, the specter of falling behind in the arms race seemed to be what kept many in the government convinced that a new bomber must be developed.

One of the greatest opponents to this new aircraft was the Secretary of Defense, Robert McNamara. Believing that ICBMs should be America's primary means of keeping the Soviet Union at bay, he halted the progress of the AMSA study by vetoing its funding in 1964. In the ensuing years, McNamara would continually permit the allocation of funds for engine and avionics development, but deny the use of funds towards the development of an entirely new aircraft. As numerous politicians did at the time, McNamara felt that by continually upgrading existing bombers, the Air Force could keep its fleet capable of carrying out nuclear missions at a small fraction of the cost of creating the plane sought by the AMSA project.

One of the plane's considered for modification at the time was the F-111A fighter jet. Supported by McNamara, several studies concluded that with relatively small modifications, the plane could be inexpensively repurposed as a low-altitude bomber. Even more importantly than the cost of the project, repurposing the F-111A would be a significantly less time-consuming endeavor than the AMSA project. If the B-52 fleet actually was quickly moving toward irrelevance, it was imperative that it be given an adequate replacement as soon as possible. However, the Air Force's Chief of Staff at the time, General Curtis LeMay, claimed that a repurposed fighter jet simply would not have the capabilities the Air Force needed in a low-altitude bomber, and argued vehemently that the AMSA project be the government's main focus in fulfilling the supposed need for a B-52 replacement.

Despite LeMay's objections, the development of the FB-111 (the bomber version of the F-111A) began in 1965. To help make up for the costs of this program, McNamara laid out a plan that would have the entire B-52 bomber fleet replaced by FB-111's by 1971, with the gradual replacement beginning in 1969. As development continued, the Air Force and McNamara continually disagreed on the purpose of the modified fighter jet. While McNamara claimed that the plane would be adequate to serve as a low-altitude bomber for years to come, the Air Force saw it as a useful but very temporary solution to the need for a better bomber. Even as the government invested its resources in the FB-111, many Air Force officials felt that a completely new bomber, despite the significant costs it would impose and the time it would take to develop, was the only permanent solution.

Around the same time, the U.S. found itself involved in the Vietnam War. In an attempted act of containment, the United States committed itself to defending South Vietnam as it battled with the communist forces of North Vietnam. Although they were never directly involved, the Soviet Union did provide support to the communist forces. This was an example of one of the several "proxy wars" that took place throughout the Cold War, where both the Soviet Union and the United States became involved in conflicts where they felt they had an

opportunity to expand their sphere of influence, or felt the need to defend it. In all of these wars, the two nations never came into direct military combat with one another, but each would in some way become an ally to their like-minded counterpart in the conflict.

In many ways, these wars were where the real victories and losses occurred during the Cold War. Although both nations continued to constantly build up and improve their supply of armaments, it was unlikely there would ever be any direct combat between the two as long as they continued to advance their offensive and defensive systems at a similar rate. In short, the threat of a nuclear conflict almost guaranteed that neither nation would ever directly attack the other, so the only means they had of actually expanding their spheres of influence was through these small, conventional military conflicts in small nations.

In spite of its cost, in the year 1970, in the midst of the Vietnam War, that the AMSA program was revived by President Richard Nixon, who hoped it would expand the nation's non-nuclear military options. With the Vietnam War providing context, it seemed that if the U.S. were actually going to uphold its influence internationally, it would have to continue to advance its conventional military technologies in order to compete in proxy wars, where the real international political gains were to be made.

The AMSA study was finally completed in 1970, and the Air Force took bids from General Dynamics (who had, several years before, submitted a study to the government claiming the necessity of the continuation of the AMSA program, Boeing, and North American Rockwell. The contract was awarded to Rockwell, which by 1974 revealed its design: the B1-A bomber. The plane featured variable sweep wings, which added complexity and cost to the design of the aircraft, but allowed it to theoretically take off at a much wider variety of runways than its predecessors, which it could do by generating maximum lift with the wingspan fully extended. With its wings in the fully-swept position, the B1-A could minimize drag at high speeds, increasing both its overall top speed and its total flight range. The plane also contained variable geometry intake and exhaust systems, to allow the plane to efficiently travel at speeds in the range of Mach 2.

To allow the plane to stay structurally sound while contending with aerodynamic forces experienced at its intended top speed, numerous critical areas of the aircraft were constructed using titanium. With titanium being notoriously expensive and time-consuming to machine, the practicality of the B-1A was somewhat hurt by the fact that its remarkable top speed required this material to keep it intact. The plane also featured advanced electronic defense systems to deal with the improvement of Soviet radar systems. These included electronic radar jamming, radar detection and alert systems, and an innovative system that could use expendable flares to throw off pursuing missiles.

However, as plans for the production of the B1-A began, problems regarding both the cost and the actual effectiveness of the aircraft. Since the year Rockwell began development, the expected unit cost of one plane had risen by almost \$30 million to \$70 million by 1975. Even a protest campaign, the National Campaign Against the B-1 formed in 1974, headed by the pacifist organization the Friends of Service Committee. Members of both the government and the general

public criticized the B1-A, claiming that despite the massive amounts of money poured into the development of this craft, it would likely be outdated by the time it was actually ready to serve duty, making it an irresponsible way to allocate the nation's resources.

Surely enough, in 1976, it was revealed by a defecting Soviet pilot that the USSR would soon be flying planes equipped with what was known as "look-down/shoot-down" radar, which would essentially eliminate the benefits any low-altitude bomber would be afforded by the effects of terrain masking. Thus, the government's pursuit of a purpose-built low-altitude bomber was suddenly rendered almost completely useless by advances in Soviet technology. Similar to what had happened with the Valkyrie, a lack of foresight into what future anti-aircraft technology might bring led the government to throw away many of its resources on a plane that would never be as useful as it was hoped it would be. This time, however, the effects of the government's lack of foresight was amplified by the constant political conflicts that held back the development of the craft and let it be developed so slowly that it was almost irrelevant before it could ever be used.

Additionally, in the preceding decade there had been a global trend towards nuclear disarmament. It started in 1968 with the ratification of the Nuclear Non-Proliferation Treaty, an international document signed by numerous nations whose intent was to restrict the expansion of nuclear weaponry to other nations and encourage nuclear disarmament. Nations that signed this document included the United States, the USSR, Great Britain, France, Germany, Italy, and Japan. Disarmament was further discouraged by the Strategic Arms Limitation Treaty, signed in 1972 by Richard Nixon and the Soviet Premier Leonid Brezhnev. It seemed that both the United States and the USSR were beginning to grow weary of expending so many resources on maintaining their position in the nuclear arms race. However, this by no means meant that either nation was going to fully disarm, and they were certainly not willing to quit fighting for global influence and control.

Additionally, by the mid-1970s the Soviet Union had entered a period known as the Era of Stagnation. This was the beginning of the end of the Soviet Union, as its economic growth slowed significantly, largely due to its command economy's inflexibility. Additionally, the Soviet Union had a policy of employment for all citizens. As the economy became more industrialized, the amount of skill necessary for many jobs increased, and the Soviet workforce did not contain enough skilled workers to keep up with this demand. Even as the United States continued to search for new ways to overcome their foe, the Soviet Union was already on its way to causing its own downfall.

With the disarming mood of the world, the Soviet Union beginning to decline economically, criticism and the unit cost of the B1-A on the rise, and the belief that the nation's current fleet of cruise-missile-armed B-52s and ICBMs was enough, President Jimmy Carter canceled the project in 1977. However, at the time of the cancellation, President Carter was also aware of and approved plans for another project, the Advanced Technology Bomber. The project, which officially began in 1979 but was not yet revealed to the public, seemed to have

potential to produce a much more advanced plane than the B-1, one which promised to present the Soviets with an entirely new challenge in defending its airspace.

The cancellation of the B-1, however, ended up hurting Carter politically. With the Soviet Union invading Afghanistan in 1979, nationalistic sentiments and anti-communist propaganda once again ran rampant in the United States. In the 1980 presidential election, Jimmy Carter was repeatedly derided by his opponent, Ronald Reagan, who claimed that Carter was weak when it came to national defense policy, citing his cancellation of the B-1 as one of his primary examples.

Reagan's election marked a shift back toward extreme hostility between the U.S. and the USSR. With that came a significant increase in defense spending, which in the last decade had actually been slightly decreasing. The B-1 project was revived. Additionally, Reagan proposed a new study to enhance the United States' ability to thwart a nuclear attack: the Strategic Defense Initiative. This project proposed spending large sums of taxpayer money in an attempt to create a space-based system of lasers that could theoretically shoot down nuclear missiles directed at the U.S.

However, at this point in the Cold War, such excessive defense expenditures were largely unnecessary, as it seemed to be highly unlikely that either nation would ever attack the other, as each could almost assuredly retaliate to any nuclear strike by the other nation with their current offensive systems. Additionally, the Soviet Union's domestic economy continued to struggle to provide a quality standard of living for its citizens, and its leader, Mikhail Gorbachev, declared that he saw no need to match the United States in its increased military spending, declaring that they were "unnecessary and wasteful expenditures that we were not going to match." In fact, he would have preferred that both nations reduce their stock of nuclear armaments, which would have allowed the Soviet Union focus its financial resources more on improving its domestic economy than on preparing for a nuclear war that would never happen.

By 1985, the United States had become a debtor nation, a title it hadn't held since the First World War. This was largely due to the government's expenditures on both national defense and on maintaining its influence abroad. While the U.S. was busy driving itself into debt in an attempt to become the world's one true superpower, nations such as West Germany and Japan, who, although allies of the U.S., had no such excessive amounts of money invested in defense, saw tremendous amounts of economic growth, even though both were in economic ruins only a few decades earlier. In its efforts to expand its influence internationally, the United States was apparently losing sight of maintaining its own financial health.

In 1981, the development of the B-1 was continued, with the claim that it would replace the now "obsolete" B-52's and fill in the gap between the current time and the time that the Advanced Technology Bomber would become operational. The new version of the B-1, the B-1B, had its first test flight in 1984. The B-1B was similar to its predecessor in many respects, but there were a few noteworthy differences. For example, the B-1B was designed to be capable of speeds of Mach 1.25, whereas the B-1A was capable of Mach 2 speeds. This allowed the engineers of the plane to replace the plane's complex variable geometry intake and exhaust

systems with cheaper, more reliable fixed geometry counterparts. Perhaps the most significant benefit of this reduction in top speed was a significant reduction in the amount of titanium that would now be required to construct the aircraft. This would notably reduce the overall cost of the plane, both in terms of the price of the raw material and the man-hours it would take to machine the titanium, which is a notoriously difficult and time-consuming metal to work with. Although these decisions decreased the functionality of the plane somewhat, they made its manufacturing and operation much more time and cost effective.

The B1-B was finally put into service in 1985. With a top speed of around 900 miles per hour, it was about 250 miles per hour faster than the B-52. However, the B-1B's 7500-mile flight range was significantly shorter than the over 9000-mile range of the B-52. Additionally, by 1995 the B1-B had been averaging a mission-capable rate of only 57%, whereas the B-52 had an average mission-capable rate of almost 80%. This meant that at any given time, a vast majority of the B-52 fleet would be fully maintained and ready for flight, while more than a third of the B1-B fleet would be in need of service. Although the B-1 had some performance advantages over the B-52, it was not as practical or useable, and the performance advantages it did have were largely offset by the fact that low-altitude bombers as a whole were rendered far less effective by Soviet look-down/shoot-down radar technology. What was really important in maintaining nuclear deterrence was having planes prepared to strike at any time, and despite all of the efforts expended on the B1-B, the B-52 was still superior in terms of its mission capability rate.

A few years prior to the official launch of the B-1B, in 1981, the Advanced Technology Bomber project was finally brought to a close. The Air Force called for proposals for a new kind of bomber, known as a stealth bomber, which would allow the Air Force to take on a new approach toward penetrating Soviet Air defenses. The proposed stealth bomber would utilize numerous new technologies to allow the plane to go unnoticed by enemy radar systems. The challenge would be to design a plane that no longer is capable of just dealing with Soviet anti-aircraft systems, but of avoiding them altogether.

Proposals were taken from Rockwell, Lockheed Martin, and Northrop Grumman. Northrop Grumman was awarded a contract to build 165 planes, which were now known as the B-2 Spirit bombers. For manufacturing the plane, an assembly plant previously owned by the Ford Motor Company in California was repurposed for constructing the plane. The actual design of the plane became a top-secret operation. All employees associated with the manufacturing or design of the plane went through extensive background checks and were sworn to keep any information pertaining to the design of the B-2 secret. If the sole necessity of the plane was to avoid Soviet radar, there could be no possibility of the Soviet Union obtaining information that might allow them to overcome its defense mechanism with their own technology. This was perhaps evidence that the Air Force had used some foresight in the development of their aircraft, and wanted to ensure the B-2 would not be rendered obsolete by potential Soviet technological developments. In order to maintain the secrecy of the project, the Air Force even used puppet

companies for purchasing materials and parts without revealing what they were actually being used for.

However, even as the B-2 was being developed to keep nuclear pressure on the Soviet Union, the USSR was moving toward its eventual falling apart, and turning away from some of its policies that made the United States find it objectionable. In the year 1986, with the Soviet economy continuing to struggle, Mikhail Gorbachev implemented the policies of perestroika and glasnost, which granted significant social, political, and economic freedoms to the citizens of the Soviet Union, whose freedom of expression had previously been severely restricted by their government. Reagan and Gorbachev met in a summit in Reykjavik, Iceland in 1986, where Gorbachev clearly signaled that he was willing to severely cut into the USSR's stock of strategic arms. Gorbachev was attempting to do what he felt would be best for his citizens by restoring the economy through the expansion of economic freedoms and reducing defense spending, made evident by his attempts to end the Cold War. Additionally, communist regimes met an end in numerous Eastern European nations, including Poland, East Germany, Hungary, and Czechoslovakia.

In short, it was obvious that the Cold War would soon be over, with the influence of communism rapidly declining in the Soviet Union itself and in Eastern Europe. And yet development of the B-2 continued, even as the missions for which it was being designed would soon cease to exist. The B-2 was first flown in 1989, by which time the development of the plane had cost the United States an estimated \$23 billion. The sheer cost of the B-2, which would end up costing in excess of \$700 million per unit, was enough to encourage heavy opposition to the continued development of the craft in Congress. Further debate surrounding the plane was triggered when testing revealed that the B-2 was not capable of avoiding radar as flawlessly as was expected. This created outrage among the plane's opponents, and even reduced the faith of some its supporters that the B-2 was money well spent. In the couple of days following this revelation, the stock of Northrop Grumman fell almost 15%.

Despite the opposition, the development of the B-2 continued. In 1990, the Congressional Budget Office issued a report analyzing the situation the government faced in deciding how many B-2s, if any, it should purchase. The report indicated that \$41 billion could be saved if no B-2s were actually ordered instead of the planned 132 units, but cautioned against the decision citing the need to stay on top of Soviet anti-aircraft technology, even though the Soviet Union was clearly attempting to move away from the conflicts of the Cold War. There were also threats of further cost increases, caused by inflation and a strike by the employees of Boeing, who provided the engines and numerous other parts used in the B-2.

Before the B-2 could enter service, the Cold War came to an end when the Soviet Union collapsed in 1991. Thus, the need for which the B-2 had been produced had been eliminated before a production B-2 would ever even take to the skies. Even as their enemy was backing down and faced a near-certain defeat, the Air Force had insisted on spending excessive amounts of money on the B-2, which would now never have a reason to even go near Soviet airspace.

With no direct need, the Air Force ordered 21 B-1 bombers, compare to the 165 they originally intended to purchase.

The B-2 itself was a fantastic technological achievement, the first production plane capable of almost fully disguising itself from enemy radar detection. One of the primary ways it achieved this was through its unique flying-wing shaped body, which naturally scattered incoming radar signals. Equally impressive was how the plane actually managed to stay in the sky given its inherently aerodynamically unstable shape. This was achieved through a fly-by-wire control system, where the pilot's steering inputs weren't directly translated into mechanical motion of the control surfaces, but was instead processed by a computer which would then electromechanically move control surfaces. This allowed the plane to use electronics and computers to constantly make small adjustments to its control surfaces to keep itself stable, without requiring constant attention from the pilot. Although its unstable nature restricted its top speed to about 565 miles per hour, its stealth technology more than made up for it in terms of its ability to safely penetrate enemy airspace. The B-2 was constructed largely of radar absorbing carbon-fiber composite materials. While they enhanced the plane's stealth capabilities, they also significantly increased both the time and money required to construct each plane. The materials were also complemented by radar-absorbing paint, an internal bomb bay, and engines mounted inside the top of the wings, all of which helped the B-2 achieve its incredibly small radar cross-section, making it almost undetectable.

As a long-range bomber, the B-2 was very capable, with its stealth technology and range of 6,000 nautical miles, but that capability came at a significant expense. In addition to the unit cost of \$700 million, each bomber was a very high-maintenance aircraft, costing about \$135,000 per flight hour, about double that of the B-1B. Each flight hour also required a total of 119 hours of maintenance, more than double that of any of the B-2s predecessors. For planes that were intended to be patrolling the skies at all times, these statistics certainly made it seem like an ineffective use of resources.

Although the B-2 never saw any flight time in the near-Soviet skies for which was intended, it has since been used in other missions as a conventional bomber, including the Kosovo War, the Gulf War, Operation Enduring Freedom, and the Iraq War. Although useful, the extreme stealth technology that caused the B-2 to be so expensive in the first place has never truly been necessary since the Cold War, as few of the U.S.'s enemies since then have had such advanced radar technology. In fact, its relatively low top speed is a detriment when it is used against enemies without advanced radar technology, as it is more susceptible to conventional anti-aircraft weapons. However, one benefit of the B-2 in modern warfare is its use of a smart bombing system, while uses GPS guidance to deliver weapons with high levels of precision. Whereas prior to the B-2 carpet bombing was a widely used bombing technique, using smart bombs allowed the B-2 to hit its targets without causing unnecessary casualties.

The B1-B was used by the Strategic Air Command for several years on nuclear deterrence missions, although it never truly replaced the B-52 bomber. Since the end of the Cold War the B1 fleet has, at the cost of \$3 billion, been repurposed for conventional warfare. It has

been used many times in Middle Eastern conflicts, but in the Kosovo War notably wasn't put into use until B-52s had already bombed the enemy. The B-1B's useful lifespan is expected to end in the year 2040. Ironically, this is the same year that the B-52, the plane it was meant to replace, is also expected to be taken out of service.

In conclusion, both bombers, especially the B-2 were innovative, well-designed planes. However, neither one ever truly served its primary purpose, despite the money and time poured into developing and producing both planes. The B-1, whose development was plagued by political hindrances and uncertainty, was kept from being used as a low-altitude penetrator until Soviet technology made its class of bomber significantly less advantageous. The time delays caused by political infighting also made it so that the B-1 was never used in SAC missions until the Cold War was reaching an end, and to this date it has never replaced the B-52 bomber. The B-2, conceived of in a time that its development seemed necessary to many, was a particularly expensive creation which never served its intended purpose, as its purpose had disappeared several years before it was fully operational. A lack of foresight and cooperation in the political realm lead to the waste of financial, human, and time resources on these planes that would never truly serve the purposes for which they were designed.

Overall, it could be concluded the both the United States and the Soviet Union lost the Cold War in one way or another. Although it was the Soviet Union that eventually collapsed, leaving the U.S. as the victor in terms of international political influence, both nations found themselves in undesirable economic conditions. The standard of living in the Soviet Union at the time of its downfall was far below that at the beginning of the Cold War, and the United States has never rid itself of its debtor status that it acquired largely because of military expenditures throughout the conflict. In conclusion, the Cold War could be classified as a war of unnecessary expenditures, as it saw both the United States and the Soviet Union win global influence from one another through traditional warfare in the form of proxy wars, while spending excessive amounts of resources preparing for a nuclear conflict that, as became clear early in the conflict, would never actually happen.

The fact that the B-1 and B-2 were ever produced is a sign that perhaps the United States government, in its attempts to maximize the safety of the nation, were not looking at things from a standpoint of cost-effectiveness and efficiency. Given the ease and cost effectiveness of modifying them, B-52s were the only aerial forces necessary to ensure that the U.S. could assuredly retaliate to a Soviet attack, and thus were all that was necessary to deter a nuclear war while the Soviet Union's economic system caused its own stagnation and slowly led to the nation's collapse. Had the U.S. made only this minimal investment in aerial deterrence, it would have been able to save its economic and human resources for other uses, and the U.S. might have found itself in a more desirable economic situation at the end of the conflict and all of the years thereafter.

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