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INTRODUCTION

When the fighting of WWII finally ended in 1945, a completely different balance of power emerged. Within ten years, two powerful new alliances, NATO and the Warsaw Pact, faced each other in Europe. Although there were brief periods both of detente and of higher tensions, this adversarial outlook remained for the next 44 years. Last year, the many revolutions in Eastern Europe forever altered the situation as these countries successfully broke away from the Soviet grasp. These changes, plus the significant ones going on in the Soviet Union itself, have created what is at present a very cloudy picture. In this paper I will attempt to look at this picture and make projections as to where it could possibly lead.

In the past, most of the relations between the countries involved in NATO and the Warsaw Pact revolved around the military or security issue. Although much tension has been reduced in Europe by the recent arms reduction negotiations and troop withdrawals, the rapid changes of the past year have created new problems, and European security will continue to be a central issue. It is for this reason that I will devote much of this paper to looking at the military situation in Europe just before the revolution. From this I hope to get an idea of the kind of thinking which will shape military strategy in light of the latest developments.

Even before the revolutions in Eastern Europe, however, the United States and the Soviet Union were working towards releasing tensions in Europe. The Intermediate - Range Nuclear Forces (INF) Treaty of 1987 did much to take the focus away from nuclear weapons and put it on
conventional arms. The Conventional Forces in Europe (CFE) negotiations began months later, and troop reductions in Eastern Europe were announced by Soviet leader Mikhail Gorbachev in December 1988. Because conventional forces have now assumed primary importance in determining the military balance in Europe, I will mostly ignore the input of nuclear weapons into the equation.

Before 1989, the balance of conventional arms in Europe was a highly debated topic among military experts in and out of the US government. The Reagan years bring back memories of bar graphs showing how the number of weapons deployed by the Warsaw Pact and NATO compared with each other. These comparisons are known by experts as "beancounts", and they were used many times during the 1980s to justify increased spending on defense by the US. Although it is clear that the Warsaw Pact did have a numerical advantage over NATO, care must be taken not to jump to any conclusions. Mere beancounts do not consider many factors and are often misleading. For one thing, counting rules can be created to make the beancount reflect what its creator wants it to reflect. For example, the two sides have disagreed for a long time on how types of aircraft should be categorized, which has helped to stall arms control negotiations. Also, NATO considers naval forces to be purely defensive, existing to protect sea lines of communication, while the Soviets want these to be considered as offensive forces. Each side adjusts its numbers to make an advantage they may have to appear lesser than it really is. Another major consideration left out of beancounts is how a weapon system or an army will perform on the battlefield. Over the years
NATO has consistently concentrated on the quality and sophistication of its weapons rather than the quantity, so to compare numbers of weapons of a certain type can give an inaccurate picture. To get a more real-world idea of how the two alliances stack up against each other in conventional warfare, many other factors must be taken into account, things such as rate of advance and kill ratio. To do this, a strategic model is needed.

STRATEGIC MODELS

To create a strategic model, assumptions about how these forces will be used must be made. In the 1980s, the most common scenario used was the "breakthrough" or "blitzkrieg" model made famous by the Nazi's in WWII. In this case, the Warsaw Pact would mobilize its forces as quickly and secretly as possible. Instead of trying to cover the entire front consisting of the western boundaries of E. Germany and Czechoslovakia, it was thought that the Soviets would concentrate their forces in multiple prongs, so that they could easily penetrate NATO's forward defenses and encircle them. The exact number of these prongs varied, but there are four natural corridors in the area that would no doubt have been used. This multipronged attack would have been necessary since the Warsaw Pact did not have a numerical advantage in all areas over the entire front, especially in the area of the Central Army Group (CENTAG) in West Germany where the excellent American and German armies are stationed. This approach also seemed to take advantage of the Pact's superior numbers of tanks and armored vehicles. Because this theory prevailed
among analysts, preventing this breakthrough was seen as the primary goal of the NATO forces. To see how well these forces would accomplish this goal, I will now look at several different models.

The first model is called the Forward Edge of the Battle-Expansion model\textsuperscript{1}, which is used by Barry Posen. To arrive at what he feels is a more real-world model, Posen adds 6 factors to beancounting: relative military capabilities over time, the effect of tactical air power on the ground battle, force-to-space ratios, attrition rates, exchange rates and advance rates. This model is based on the breakthrough theory that I have already described. On the first point, relative military capability over time, Posen gives NATO the advantage. This consists, first of all, of the rate of force mobilization and training, and Posen creates buildup curves for the Warsaw Pact and NATO which are different from those tabulated by the Department of Defense. In comparing the two armies, Posen uses Armored Division Equivalents, which were developed by the DoD. The ADE is a way to compare armored divisions which differ in number, type, and quality of weapons and troops. For example, Posen calculates that NATO could have the equivalent of 50 ADEs ready for battle two weeks after the beginning of mobilization. The DoD estimates that NATO could have only the equivalent of 30 ADEs ready in the same time\textsuperscript{2}. Posen says that this is because he assumes that all forward-based NATO troops will be ready for action immediately because of training and experience. His curves for the


\textsuperscript{2} Ibid, pg. 113
Warsaw Pact are slower because he takes into account the post-mobilization training needed for non-ready troops and reserves. Secondly, NATO is given the advantage for emphasizing command and support elements. This includes both maintenance and C 1 (command, communications, control and intelligence) which would help both in the short and the long term.

Tactical air power gives another advantage to NATO according to Posen, since it places more emphasis on this. If naval aircraft are included, NATO has a numerical advantage of 500 fixed-wing aircraft and 400 helicopters versus 800 helicopters for the Pact. These numbers include only what Posen defines as close-air support or ground attack aircraft. Although tactical air is sometimes not included in the beancounts, Posen says that it has a great effect on the land battle. This is shown in his model, where NATO aircraft are assigned a higher kill rate and sortie rate due to better pilot training in this role.

Still another factor that may favor NATO's armies in the breakthrough scenario according to this model is force-to-space ratios. Ideally, the Soviets would be able to use their superior numbers of tanks and armored vehicles to obtain a 3:1 ratio to NATO's armor in several areas of the front. This 3:1 ratio is accepted as a rule of thumb for the proportion of offensive forces needed to defeat an entrenched enemy. Warsaw Pact generals predict that they would actually need a 4-6:1 ratio to achieve a breakthrough. Of course, there are many reasons why the Pact forces

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3 Ibid. pg. 121
would find even the 3:1 ratio difficult to meet, says Posen. Most important is the fact that the Warsaw Pact does not outnumber NATO in more than a very few places on the front. The generals' even higher predictions of 4-6:1 ratios would occur only in very small sections of the front. The author believes that the Soviets' plan for 4 divisions in a 50 km breakthrough area is highly unlikely and comes up with a probable ratio of 1.4:1 in favor of the Warsaw Pact.

Again the nod goes to NATO for better command and support elements in its divisions and superior tactical air power delivering higher kill rates at lower attrition ratios. Posen then goes on to say, however, that armored and mechanized attrition rates for both sides would likely be high, with the Pact's being no higher than 0.5% higher than that of NATO.

To be able to counter the Warsaw Pact's superiority in numbers, NATO will need to maintain favorable exchange rates. Again the 3:1 ratio is applied, this time saying that it is the maximum defense-to-offense exchange ratio which will allow the defense to hold back the attackers. Although NATO assumes only a 2:1 ratio to be the maximum, Posen cites several examples which point to ratios of up to 6:1.

The last factor that Posen looks at is advance rates. Although Soviet doctrine calls for very high advance rates of up to 100 km per day, these are wildly unrealistic. Using historical data from WWII and the 1973 Arab-Israeli War, Posen arrives at a maximum advance rate of 15-20 km per day. Although this approach may not account for the latest technological advances in armored vehicles or the peculiarities of the

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4 Ibid, pg 126
operating area, they are probably much closer to reality than the Soviet estimates. In the breakthrough scenario, the Soviets expect Warsaw Pact forces to be able to cover 5 km per day, while the author comes up with a much slower 2 km per day\(^5\). The slower advance rates argued by Posen give NATO yet another advantage, that of having more time to reposition forces and mobilize reserves.

From looking at this analysis, it is not hard to see that Barry Posen thought that at the time the book was written, 1989, NATO was not decisively outnumbered and could thwart an attack by the conventional forces of the Warsaw Pact. Since NATO builds weapons with more of an emphasis on quality and has superior command and support elements, it cannot be assessed by Pact standards. Indeed, he shows this in his use of ADEs. Posen equates 1 NATO ADE with 1.5 Pact divisions. Although I like Posen’s model because it considers factors that others do not, criticisms can be made. First of all, it assumes that NATO will have advance warning of any attack by the Warsaw Pact. Although an attack would most likely be preceded by a few month’s political tension during which both sides could mobilize, the model is incomplete for not considering that in some circumstances the Soviets could mobilize secretly and launch a surprise attack, which is the whole point of a blitzkrieg. Also, Posen takes an optimistic and a pessimistic approach to most of the numbers that he uses, but his analysis is a bit inflexible because he does not consider a change in these values.

\(^5\) Ibid. pg. 131
The second model I will look at is put forward by John Mearsheimer. In his analysis, Mearsheimer focuses on the number, placement and use of ADEs, taking into account terrain, force-to-space ratios and advance rates. He does not include tactical air power, which I believe to be a significant omission, especially in light of the importance that Posen gives to NATO's superiority in tactical air power. Like Posen, he assumes the breakthrough scenario, but he goes farther to explain this than Posen does. His model also assumes that this breakthrough could not be effective without prior Warsaw Pact mobilization, and that NATO forces will immediately begin mobilization after they detect that of the Pacts. This last point is critical, because Mearsheimer considers it important that NATO mobilizes within a week of the start of Warsaw Pact mobilization. If NATO fails to do this, it will be unable to stop the attackers from gaining a quick and decisive victory. Mearsheimer believes this to be NATO's main objective, that is, to create a long, drawn-out war which it is better able to survive.

Using figures from 1976, Mearsheimer comes up with Warsaw Pact advantages of 1.2:1 in troops, 2.8:1 in artillery and mortars, and 2.5:1 in tanks. Although it is a bit unclear how he arrives at these numbers, using 1989 figures and the NATO Guidelines Area (which includes the Benelux countries, both Germanies, Czechoslovakia and Poland) for reference, I concur with his figures, except that I arrived at a 1.7:1 ratio.

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7 Ibid. pg. 144
for tanks and armored vehicles. Using his numbers, Mearsheimer comes up with a Warsaw Pact advantage of 1.2:1 in ADEs over NATO. This number is important. Mearsheimer says that Western analysts believe that the Soviets would try an 8- or 10-pronged attack on the front line, and he assumes NATO divisions spread out evenly across the line. With this configuration, the Pact forces could not break through NATO's lines even with an overall advantage in ADEs of 2:1, based on the same 3:1 rule that Posen accepted.

As I mentioned earlier, NATO breaks the western borders of E. Germany and Czechoslovakia into three army groups. Mearsheimer points out that in CENTAG, in West Germany, there are only three natural avenues through which the Soviets and their allies would likely use to launch an attack. This area would be unattractive to the invaders, however, because CENTAG consists of well-trained German and American forces, and the rough terrain is not conducive to the rapid movement required by a blitzkrieg. This leads many to consider NORTHAG a prime target, where less capable Dutch and Belgian forces are stationed and the terrain is not as harsh. Mearsheimer contends, however, that these divisions should be enough to provide a good force-to-space ratio of up to 7 km per brigade. A good force-to-space ratio should also be achievable in CENTAG due to the rough terrain.

Mearsheimer then goes on to explain advantages and disadvantages of the Soviet forces. First of all, he claims that Soviet generals are not entirely sure if a blitzkrieg could work on a modern battlefield. The

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divisions are made up of many tanks and heavy artillery, which would tend to slow them down in addition to the factors mentioned above. The Soviets also question the effectiveness of a blitzkrieg against prepared defenses, and in light of the modern-day proliferation of anti-tank guided missiles on the battlefield, the only advantage that Mearsheimer sees with the emphasis on tanks and heavy artillery is that this better prepares the Warsaw Pact forces for a strategy of attrition, which could be useful if an attempted blitzkrieg is stopped.

More disadvantages can be seen in the structure of the Soviet army and the way it is trained. The Soviets use a very rigid command structure, which allows little room for initiative on the part of officers and NCOs. The men that are under these officers are largely conscripts with little training. And Mearsheimer says that these conscripts are trained more for fighting a nuclear war than a conventional one.

In his model, Mearsheimer states that if NATO mobilizes immediately, then it should be able to turn the war into one of attrition, but not decisively defeat the Warsaw Pact forces. He also cautions against any force reductions in NATO, since it would increase the threat of a successful breakthrough. NATO must continue to modernize its forces to keep up with the Soviets. I believe that his conclusions would be somewhat altered had he considered air and naval forces, where NATO holds a distinct advantage even now. The combined aircraft from air bases and US aircraft carriers could give NATO the advantage it needs to push back the Warsaw Pact forces. Like Posen, he does not give much consideration to a scenario where NATO fails to mobilize immediately. Again, however, I won't
criticize this point too harshly since I agree that NATO leaders would be intelligent enough to start mobilizing soon after the detection of a Pact mobilization. There have been many differences within the Alliance before, but I think in this case the leaders of NATO countries would be forced to act together. This model improves on Posen by incorporating more analysis of strategy and doctrine, but it does not get as close to the battlefield as it should.

A model which is closer to the battlefield than Mearsheimer's, but one which I will only look at in brief, is the "adaptive-dynamic" model of Joshua Epstein. As the name implies, this model attempts to predict how the opposing forces will react to each other. Epstein's model includes both ground forces and close-air support (CAS) from combat helicopters and attack jets. For example, he assumes a 3:2 ratio in number of sorties in favor of NATO aircraft, and credits NATO with double the tank kills per sortie of the Warsaw Pact. A factor which partially makes up for the advantage given NATO by these statistics is that Epstein believes that the Pact will be willing to sustain higher attrition rates than NATO, although he does not explain why. His assumption of a constant casualty rate is also questionable. This model is useful, however, in that it allows for inputs to be varied by the user and attempts to portray combat realities more closely than the previous models did. Epstein concludes that even under a challenging scenario, NATO would be able to stalemate the Warsaw Pact armies.

9 The Conventional Balance: How Far Beyond the Beantown Are We?, Defense Budget Project, June, 1989, pg. 54
All of these models have their strong and weak points. They are all relatively simple compared to the models of war games which are run on supercomputers, but these can get too complex and lost in the details, forgetting the war for the battle. An excellent model would incorporate Mearsheimer's attention to military doctrine and strategy, Posen's consideration of multiple factors, and Epstein's goals of flexibility and combat reality. Of any one of these, Epstein's probably comes the closest to this ideal. Tactical air power should definitely be considered in any model, as well as battle conditions such as terrain and force-to-space ratios. All of these models come to the conclusion that given the military balance existing in the late 1980s in Europe, NATO would at least be able to stall an attempt at breakthrough by the Warsaw Pact. Combining Mearsheimer's in-depth analysis of ground forces with Posen's and Epstein's addition of close air support to the land battle seems to give NATO the ability to turn back and defeat the Pact forces, all other things being equal. Of course, there has been an avalanche of change in the military balance since December 1988, and the question arises as to what these models would predict today or in the next few years, or even if these models are still relevant or are mere relics of the Cold War? To attempt to answer these questions, the dramatic changes in the military balance must first be analyzed.

RECENT CHANGES IN THE MILITARY BALANCE

According to The Military Balance, 1989-1990, written in the summer of 1989 before all of the dramatic Eastern European revolutions happened,
there were three events of the previous year which greatly affected the military balance in Europe. The first event was the formal publication of force strengths by NATO for the first time in 5 years and for the first time ever by the Warsaw Pact. While this was an important step, towards arms reduction talks, it also revealed problems that would have to be worked out before effective negotiations could begin. Both sides came up with different numbers for themselves and their opponent because of different perceptions and counting rules. The Pact's count of NATO forces included naval forces, an area where NATO has a distinct advantage. In fact, the Soviets feel that it is such a strong advantage that it should be included in arms reduction talks. The NATO count, of course, emphasizes the ground forces of the Warsaw Pact, where they have a distinct advantage, and ignores naval forces because it sees its own naval forces as purely defensive in nature and for the sole purpose of protecting sea lines of communication. Both sides also had different counting rules for artillery and aircraft, something which could potentially hold up negotiations.

A second and more dramatic event occurred at the UN General Assembly on 7 December, 1988. On this day, Gorbachev announced to the world dramatic unilateral reductions in conventional weapons for all members of the Warsaw Pact excluding Romania. A total of 250,000 troops, 10,000 tanks, 8,500 artillery pieces and 800 combat aircraft would be removed from Eastern Europe and European Russia, plus 250,000 troops from the Chinese border, in 1991. Of these, 50,000 troops and 5,300 tanks

of the Red Army would be removed from the territories of the USSR's allies. In addition to these massive withdrawals, Gorbachev announced that the Soviet military would continue with its defensive doctrine and adopt a policy of "reasonable sufficiency". This last is sure to be interpreted in many different ways both inside and outside of the Soviet Union.

The third important event mentioned by *The Military Balance* was the opening of the CFE talks in Vienna. The purpose of these talks is to establish "a secure and stable balance of conventional forces at lower levels"\(^{11}\), and again it was the Soviets who took the initiative with a new proposal. This included the reduction of Soviet forces outside of the Soviet Union to 350,000 troops and 4,500 tanks. Even further reductions were proposed by President Bush in May 1989, after the NATO summit. This would limit both sides to 275,000 troops in Europe, and the US agreed to try to establish counting rules for aircraft. While this was a small cut for the US, it represents a reduction of 325,000 additional Red Army troops\(^{12}\). These reduction proposals were certainly dramatic, but the events in Eastern Europe of the next several months so changed the balance of power that soon even these negotiations seemed inadequate. Members of Congress began pressuring the White House to negotiate for further reductions, but at the superpower meeting in Malta in December, Bush refused to budge. As the talks seemed to bog down in Vienna, the nations of Eastern Europe began to break ties with USSR and its communist

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\(^{11}\) Ibid, pg.230

ideology, and in mid-January the government of Czechoslovakia called for the complete removal of all Soviet troops from their country. This would include about 75,000 troops in addition to the troops already being withdrawn. The Hungarians soon followed suit with their own arms reduction plan that went beyond those of the superpowers but received little attention. The next major proposal came from President Bush in his State of the Union address. He proposed a ceiling of 195,000 troops each from the USSR and US in Central Europe, with an additional 30,000 for the rest of Europe. This would in effect give the US a 30,000 troop edge, since there were no Soviet troops stationed outside of Central Europe. And talks going on with Czechoslovakia and Hungary center on removing the Red Army from those countries by 1992.

Obviously, these reductions are going to cause a major shift in the balance of conventional forces towards NATO, and lower the ability of the Warsaw Pact to launch an effective attack. Even the first unilateral reductions announced by Gorbachev created a near parity in the number of tanks in Central Europe. A quick breakthrough attempt by the Warsaw Pact would now be foolish, since many troops are already withdrawing from Eastern Europe. This is of course a big change from 1988 when some analysts gave the Pact a good chance of victory if NATO was slow to react. Increased preparation times would be necessary for the Pact to launch any kind of attack, giving NATO plenty of time to prepare and mobilize. And finally, the Pact's ability to sustain the desired levels of force superiority, shown by the models to be shaky earlier, is now nonexistent. When the Warsaw Pact had superior numbers, they had a slight advantage in ADEs
according to the models; with parity between the USSR and the US the advantage will shift towards NATO, especially since the ability of the Warsaw Pact to even function as a military alliance is hardly even an issue. It is clear that many of the assumptions and conclusions reached by the strategic models are no longer relevant. As I have already mentioned, the one thing that they all took for granted, a breakthrough attempt, is no longer possible. Mearsheimer cautioned against force reductions in NATO, but he never mentioned force cuts by both sides. What is unclear now is what these models should be replaced with, since post-WWII Europe is now in a period of transition. To help answer this question, I will now look at some of the political and economic issues facing the two alliances and how each may adapt in the future.

ISSUES FACING THE WARSAW PACT

Of the two alliances, the Warsaw Pact has obviously seen the greatest changes recently, while the shifts in NATO have mostly been in reaction to this. Although the Eastern Europeans' journey down the road to democracy could never have started without the permissiveness of the USSR and Gorbachev in particular, they have now left the Soviets in their dust. Indeed, there is even more uncertainty about the future of the USSR than of its former ideological comrades. Since it is still the most powerful country in Europe militarily, much of the balance of power in Europe still hinges on the outcome of the political and economic reforms put in place by Mikhail Gorbachev.

Back in 1985 when he first took power, Gorbachev's goal was the
creation of a Soviet Union with a more efficient economy, yet still under the rule of the CPSU. Today, the Soviet Union is in the midst of an economic crisis. The Soviet people are facing even greater shortages of food and consumer goods than before 1985, and inflation is on the rise. Although the average Soviet citizen may have a higher standard of living than he did before, Gorbachev's policy of glasnost has raised the expectations of his people, and these have not been met. Some critics of Gorbachev say that his economic reforms have not gone far enough. But these critics may be silenced this summer, when sweeping reforms influenced by Poland's "Big Bang" experiment may be introduced. These reforms would include the liberalization of prices, the freeing of trade, the selling of state companies and, most critically, making the ruble convertible with foreign money. These reforms will probably create a more efficient economy in the long run, but the Soviet people will be asked to make even more short-term sacrifices. In Poland, these policies brought about a 70% increase in inflation in January alone, a 40% drop in the standard of living, and unemployment that could put up to 2 million Poles out of work by the end of the year. The question is whether the Soviet people will be willing to accept these further hardships after suffering under Communism for more than 70 years. If the recent coal miners strikes are any indication, Gorbachev should be prepared to face even more opposition.

This question becomes more important in light of recent changes in

the structure of the Soviet government. More and more, the people are having a say in who gets to make the rules and what these rules are. True multi-party elections have not yet taken place, but nationalist Popular Fronts in some republics and factions within the CPSU itself are taking advantage of the removal of the constitutional guarantee of Communist power. The abandonment of this guarantee along with the voting for positions in the new Soviet Congress and for higher CPSU positions was designed by Gorbachev to keep the Party intact. This seems to have backfired, however, since in recent elections many hard-line communists were voted out in favor of democratic reformers who are not as worried about Party solidarity. It seems likely that in the next few months opposition parties will be legalized, and already there is speculation about the creation of a social democratic party formed from the members of the Democratic Platform, a faction of the CPSU which has threatened to split. While these actions make it seem like Gorbachev is diminishing his own power base, he has at the same time been able to strengthen his powers as President of the Soviet Union. On March 13, the Congress of People's Deputies gave the President the power to send troops to an area to quell uprisings, and also gave him personal control over a policy-making body that will replace the Politburo. The President is currently elected by the Congress, but in 5 years it is expected that he will have to face direct popular elections.

Taking all of this into account, it seems that although Gorbachev is likely to face decreasing popular support, he has managed to make it likely that he will stay in power for the foreseeable future, which I will put at
about 2 years. *The Economist* comes up with three possible ways that things could turn out in this respect. The first is called Restoration, and I consider it very unlikely. This takes into account the fact that the CPSU still holds power and that the Central Committee can still get concessions from Gorbachev. However, if the current factions in the CPSU decide to formally split at this summer's party congress, this view holds that Restoration could not take place. The second alternative future presented is the opposite of the first. In this scenario, there are swift moves towards political pluralism and a market-led economy. Although Gorbachev has lost popular support, he decides that he will no longer make compromises and will push these programs through. In the third scenario, nothing is accomplished in Gorbachev's latest drive for reform, and the results are a partial multi-party system and a drive for a planned market economy. If this scenario were to happen, *The Economist* says that things would reach a boiling point with insurrections in multiple republics, the breakdown of the CPSU, and a return to authoritarianism due to the resulting anarchy. Of these three possibilities, the second is the most optimistic and, I believe, the most likely. However, it could create even more conservative backlash from the people and the government, and make Gorbachev's position even more precarious. Also, the third is still possible, and it brings out an important problem that I have yet to touch on, that of the growing nationalist movements inside the Soviet Union.

The problem of nationalist movements puts more than Mr. Gorbachev's stability in danger, it puts the stability of the Soviet state in

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14 "Whatever he does. clap". *The Economist*, 17 March 1990, pg. 11
danger. The Russians, because of the huge size of their country resulting from past expansionism, have always had troubles with ethnic minorities. Recent events, however, have made this issue critical to the survival of the USSR. The violence in Armenia and Azerbaijan last year and March's declaration of independence by Lithuania threaten to have a domino effect on other nationalities within the Soviet Union. Although their approach to independence is more cautious than Lithuania's, the republics of Georgia and Estonia have announced that they will also push for independence. The use of Red Army troops in both Azerbaijan and Lithuania, while effective so far, only goes to show how far these republics will go and how limited is the Russian's power to stop them. This issue is far from being resolved, and if a domino effect does occur among Soviet republics, the anarchy and authoritarian rule of the third scenario do not seem far-fetched. Obviously, a return to a hard-line Soviet government would not contribute to the lessening of tensions between the USSR and the West.

Stability is not a problem for the USSR alone. The speed with which the countries of Eastern Europe toppled their Communist governments was breathtaking, but in a way frightening. These are countries whose economies have been ruined by 45 years of communism. East Germany at least will be helped by German reunification, which I will get to later, but for the others, economic recovery will be a painful process. No amount of foreign aid can totally remedy this. I have already described Poland's problems, and the other countries can expect to face similar difficulties. More worrying, however, is the fact that most people in these countries
have never lived under a democracy. After WWI, the countries of Eastern and Central Europe got somewhat democratic constitutions, but by the time that Hitler's tanks rolled into Czechoslovakia it was the only true democracy remaining in the area. History is definitely working against these people. So far, most of these new democracies are running well, with free elections already having taken place or scheduled to in the next few months. Troubles continue in Romania, though, with ethnic violence between Hungarians and Romanians in Transylvania and disputes over the timing of elections. And it is not impossible that the failure of economic recovery in any of these countries could mark a return to authoritarian rule.

As I have shown, the future of the countries of the Warsaw Pact remains uncertain as they are now in a period of transition. Even the future of the Warsaw Pact itself is uncertain, although it is probable that it will not continue as a military alliance. At the CFE talks going on in Vienna, a Soviet delegate mentioned in private that Moscow was planning to have all of its troops out of Eastern Europe by 1995\textsuperscript{15} and they have already started to leave Czechoslovakia. None of the new democracies will be able to afford much of a defense force in the next few years, and even in the USSR, cutbacks in military spending are being driven by economic need. Although the Soviets say that the Warsaw Pact will continue to exist, it is likely to see some major reorganization. The future of the Pact will be formed by political and regional interests rather than any common

\textsuperscript{15} "The new superpower", \textit{Newsweek}, vol. 115, 26 Feb. 1990, pg. 17
ideology. Its ruling council, which used to be made up of the 7 Communist leaders, will in the future likely be made up of heads of state of government. The strong nationalism seen in the countries of Eastern Europe, as well as the removal of the Red Army, would seem to take away the chances for serious military cooperation in the next few years. If trends continue the way they have and the Soviets are true to their words, by 1995 or sooner the East will provide an even further reduced military threat to the West.

ISSUES FACING NATO

For now, however, the West still needs a way to protect itself against the possibilities that exist because of the instability of Eastern Europe which I mentioned earlier. This protection is NATO. For over 40 years, NATO has provided the countries of Western Europe with protection against the forces of the Soviet Union and its allies. There are a number of reasons why NATO has proven to be so durable. By the late 1940s, it was clear that the Soviets were going to be a security threat to Europe, and the members of NATO agreed on this and set up their alliance to specifically guard against this common threat. Also, the costs of being in NATO were initially seen by all to be outweighed by the benefits. And at the time and in the years ahead, NATO seemed like the best answer to the European security question. Since the countries of Western Europe were in bad shape after WWII, the US provided the deterrence to the Soviets with its "nuclear umbrella" and conventional forces. These US troops in Europe were critical to deterrence by increasing the risk of nuclear escalation.
Any attack by the Soviets on Western Europe would involve US forces, making it more probable that the US would counterattack with nuclear weapons. These NATO conventional forces were also critical for the Alliance’s strategic doctrine of flexible response. They had to be strong enough to provide a possible alternative to nuclear war, but not so strong that their strength would imply a willingness to fight a lengthy conventional war. Built around this strategy, NATO remained relatively stable up through the mid-80s. It was then that Gorbachev came to power and started to promise reforms, and West European public opinion turned against the stationing of American nuclear missiles in their countries. The INF treaty of 1987 was hailed by most people as a move towards the reduction of East-West tensions, but there were some who feared that it was chipping away at the credibility of NATO’s flexible response. And of course by the end of last year there were even arguments about the continued relevancy of NATO in light of everything that happened. The last 18 months have raised more questions about European security than have been answered. I will now look at some of these questions and see how they have changed perceptions of NATO’s role, structure and even its existence.

The first issue I will look at is whether or not the US will continue to play a role in NATO. This issue has many facets to it. First of all, there is domestic pressure to balance the budget. President Reagan will be remembered for two things: the Iran-Contra affair and the buildup of national defense. The Soviet’s rapidly improving military capabilities had given them a numerical advantage in conventional forces, and it was also
believed that the quality of their weapons was improving. Although, as I showed earlier in the paper, the real-world advantage was not enough for them to win a decisive victory in Europe, top military commanders and the President were convinced that large increases in defense spending were needed to catch up with the Soviets. While this policy contributed to the Soviets having to back down and eventually make reductions because of the strain on their economy, it also affected the US economy by contributing significantly to the national deficit. Although the Gramm-Rudman deficit reduction law forced President Bush to cut back on military spending, before the revolutions of 1989 his budget proposals still showed an increase in defense spending. However, these revolutions and subsequent negotiations with Gorbachev ushered in what some in the defense industry like to call the "Gramm-Rudman-Gorbachev Era". Because of the perceived lowering of the military threat in Europe, many in Congress are calling for a "peace dividend", taking money from the defense budget and putting it into social programs. Although President Bush is against this, the issue has sparked a somewhat heated debate among the upper levels of government. Mr. Webster, the director of the CIA, argues for greater reductions in defense spending because he claims that the Soviets would be unable to start a new arms race even if Gorbachev was kicked out because of domestic problems in the USSR. On the other hand, Secretary of Defense Dick Cheney says that US military spending should be based on present Soviet capabilities, not their intentions, and that cutbacks should go no farther than what has already been negotiated. Webster's view is popular in Congress, and this could make it very difficult for the
Pentagon to push its budget through intact\textsuperscript{16}. Democrats are already planning to significantly reduce the defense budget. Already there have been many base closings, including 6 Air Force bases and a Navy base in Europe. And 4 new aircraft programs, the B-2, C-17, A-12 and the Advanced Tactical Fighter are currently being scrutinized by the Pentagon and will probably be delayed, extended or cancelled. This trend creates significant problems for now and in the future if the East European situation doesn't turn out as well as everybody hopes. For the past 40 years, NATO has enjoyed an advantage in technology over the Warsaw Pact which has lent it stability. This edge in technology is critical in maintaining the credibility of flexible response. In the past few years, however, the Soviets have made great strides in this area, as seen in the MIG-29 fighter, and are now very close to or at technological parity with the US in conventional weapons. When the recent negotiations are fully implemented, the Soviets and Americans will have parity in troops, giving NATO an overwhelming numerical advantage. This will make technological parity less of a problem, but the US defense industry should not be allowed to go stale. It will be needed as both sides move towards a smaller, more efficient military. There is some truth to what Webster is saying, but I think caution would still be prudent. For now, my vote goes with Mr. Cheney.

A second facet of this issue is whether US conventional forces are needed or even wanted in a changed Europe. Ever since NATO was formed,

\textsuperscript{16} Bond, David, "Tactical programs up for grabs in Gramm-Rudman-Gorbachev Era", \textit{Aviation Week and Space Technology}, vol. 132, 19 March 1990, pg. 55
the US guarantee to Europe has been at the heart of the Alliance. The stationing of American troops in Europe provides concrete evidence of the coupling of American defense to Europe, and with INF this has become even more important. But the recent negotiated reductions in these troops has led some to consider a Europe without US troops. Many Europeans now favor a broader security framework that looks at Europe as a whole and takes into account the recent resurgence of nationalism. The year 1992 will bring about a close economic union among Western Europe through the EC, and the French and British are talking about increasing the role of the Western European Union in military cooperation. And while many international joint defense projects have fallen by the wayside, such as the NATO frigate, others have succeeded. The Tornado and the European Fighter Aircraft prove that the Europeans can forget their national goals in favor of cooperative international ones. However, the Europeans themselves warn against a return to American isolationism. The US has become an integral part of European defense, and the governments of NATO agree that for now, this shouldn't change.

A third, and probably the most important issue concerning the future of NATO is what to do about a new, reunified Germany. Just one year ago, anyone but perhaps the Germans would have considered a reunification out of the question. Yet although the Soviets were slow to approve of this, it has now become inevitable. The victory of the East German conservative alliance, which has ties with West German Chancellor Kohl's Christian Democrats, was in effect a vote for reunification. According to Kohl, all-
German elections should take place next year. There will be many difficulties in integrating the two countries, but the biggest concern right now is fitting this new Germany into the European security scheme. The Soviets are pushing for a neutral Germany, but the West German government is strongly against this, as is the US. There are basically three ways that this could go. The first option would be for Germany to use France as a model. This would mean staying in NATO, but not participating in the integrated military command. A second option would have Germany remain in NATO but have no foreign troops stationed on its soil. The third option would be for American and Soviet troops to remain in their respective parts of Germany for a transitional period. The current West German army would continue to operate in what is now West Germany, while national German units would be in East Germany. Of these options, I believe the last to be the most likely for the near future, with the Soviets pulling out by 1995 and the eventual creation of an all-German army.

There are several reasons why US troops should remain in Germany for the time being. First of all, for the American nuclear umbrella to cover Germany, US troops need to be stationed there to enhance credibility. Without these troops, the Germans might consider developing their own nuclear weapons, which the Russians do not really want to see. Second, as long as there are Red Army troops in Eastern Europe, US troops should remain there also as a matter of principle. Third, many of Germany's neighbors, Poland in particular, are wary of a powerful new Germany and

17 "Helmut's hat trick", *The Economist*, 17 March 1990, pg. 43

the revival of nationalism. The American troops could help to lessen these fears.

For now, NATO can continue to operate somewhat as it has for the last 40 years, although with reduced numbers and plans for the future. It can be seen as a kind of stabilizing force against the growing nationalism in Europe. It can also serve as the base for the broader all-European security framework that is hoped for. This means that NATO will eventually have to adapt to change or become irrelevant. The new balance of forces has already prompted some strategic stages to be considered. Since US troops will now be limited in the central region of Europe, it is suggested that NATO should move away from its strategy of forward defense. This would make sense, since it existed primarily to stop the now impossible breakthrough attempt. Instead, the focus would be put on NATO's flanks in Turkey and Norway, and there would be a shift towards lighter, more mobile forces rather than armor. This shift could be part of the Army's decision to halt production of the M-1 tank. Another possible change that could occur within NATO would be the shift towards more collaboration among its members in arms production, instead of just mainly European collaboration. Recently, the US ambassador to NATO proposed a "NATO defense GATT", which would be a mechanism for cooperation and technology transfer between members. Since the defense market will continue to shrink in the next few years, efficiency will become of utmost importance. This organization could serve to limit

19 “US role in Europe linked to NATO's uncertain future”. Aviation Week and Space Technology. 19 March 1990, pg. 79
protectionism, eliminate tariffs and set up dispute-settlement mechanisms. Although this plan could have a hard time getting past national legislatures where protectionism keeps jobs, it has been well received by some defense contractors and governments, and would be an excellent way to keep the US involved in European security. As I mentioned earlier, no one wants to see the US return to isolationism.

CONCLUSION

So much has happened over the last 18 months that it's difficult to see how things will turn out in the next few years. Hopefully, upcoming negotiations will help to clear this up. The CFE talks are continuing in Vienna and have made progress over the classification of some weapons. The "two-plus-four" talks between the two Germanies and the former occupying powers will start soon after the East German elections, and will attempt to decide how the new Germany will fit into the European security picture. This fall, talks are scheduled among 35 European nations plus the US at the Conference on Security and Cooperation in Europe. CSCE will examine proposals for the broader European security arrangement that I mentioned earlier. Finally, there is already talk about a CFE 2, which would again de-emphasize the two alliances and concentrate on a single European security agreement.

It is comforting to see these moves towards greater international cooperation. But for the short run, the West especially has to be prepared for every scenario that could come out of the unstable conditions in Eastern Europe. Slow, measured cutbacks would be the prudent way to go
about this, and there should remain at least 100,000 American troops in Europe to make the message clear that the US is still committed. As far as strategic models go, these may focus increasingly on conflicts in the Third World as tensions are reduced in Europe. A new model for Europe would dump the breakthrough assumption as well as forward defense. Possible new scenarios might be how to handle a NATO response to the excessive use of violence by the Soviets to put down Lithuania or another rebel republic (only in an extreme case), or possible clashes between the East European states. This new model would have to take into account smaller, faster armies where force-to-space ratios might not matter as much, and more advanced tactical air power. But if continental European security does pan out, there may never again be a need for a model of warfare in Europe.
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