

CHAPTER 4

MAD AND U.S. STRATEGY¹

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From almost the very beginning of the Cold War, American nuclear strategy did not principally target Soviet cities. Most American nuclear weapons were aimed at military targets. Nonetheless, it was not until Secretary of Defense Robert McNamara's address at the May 1962 NATO Ministerial and his subsequent public speech at the University of Michigan that the United States explicitly adopted a "city-sparing" nuclear strategy. Specifically, McNamara called for the creation of a meaningful Single Integrated Operational Plan (SIOP) that spared cities to the extent compatible with destroying enemy military targets.

Through the 1960s, the Defense Department and successive presidential administrations allowed mutually assured destruction (MAD) to be perceived as strategic doctrine. And, indeed, MAD did have significant subsequent influence over plans and technology, blunting calls for greater weapons accuracy. However, MAD never became, in practice, America's strategic doctrine. Moreover, the city-sparing aims of the Athens speech were never fully abandoned. This chapter aims to correct the perception that by 1964, McNamara concluded that his "no cities plan was a dangerous illusion,"² and thus turned to rely on MAD.

MCNAMARA'S ATHENS AND ANN ARBOR SPEECHES

Since the mid-1950s at RAND—where the most innovative thinking on nuclear strategy was going on—there was a desire to escape from the danger of spasm nuclear war. Those thinking about this problem at RAND considered MAD so absurd and terrible that they were skeptical that American or Soviet leaders would ever order such an attack.

This doubt was reinforced powerfully by the situation in Europe. The bedrock of the North Atlantic Treaty Organization (NATO) was America's promise to use nuclear weapons first to discourage a

massive Soviet conventional attack. As the Soviets developed their own significant strategic nuclear force, the overwhelming bulk of these weapons were directed against Western Europe rather than the United States. As a result, many Europeans began to wonder whether the American promise to use nuclear weapons would be upheld and, if so, under what conditions. This European concern made it imperative to enhance the credibility of what were then called "type two" nuclear deterrents. These nuclear options were designed not to deter direct nuclear attacks, but rather to deter other unacceptable actions an aggressor might take.

In addition, the need for a wider variety of nuclear options was also very powerfully bolstered by the experience of the long Berlin crisis. In fact, William Y. Kaufman, the analyst most directly involved in elaborating the Athens strategy, claims that Berlin was the most dangerous of all potential nuclear crises, more dangerous than Cuba. Even before the Berlin crisis, however, there was reason for Europeans to worry that the United States would not defend them. Certainly, Nikita Khrushchev's missile bluff, which was underlined by the launch of Sputnik in 1957, powerfully reinforced European doubts about the American nuclear guarantee. What the Russian missile bluff made clear was that there was a Soviet strategy to extract concessions from the West over Berlin by using the West's fear of Soviet ballistic missiles. While this turned out to be a bluff, it took 3 or 4 years for that to be clearly known.

Throughout this period, from the late 1950s through the early 1960s, ideas about nuclear deterrents were very much in flux. The idea of minimum deterrence or finite deterrence, by which nations would need only develop a small invulnerable nuclear force aimed at an opponent's population centers, was put into circulation by the French and the U.S. Navy. The Navy was then promoting its submarine-launched ballistic missile fleet. This idea generated considerable interest. Just before President Kennedy entered office, the new Chief of Naval Operations predicted that an admiral would be the next NATO Supreme Allied Commander, Europe (SACEUR) because America's nuclear deterrent was going to be the Navy's responsibility.

It was in this context that McNamara delivered his speech to the NATO Ministerial in Athens on May 6, 1962. It set forth a

comprehensive statement of American policy on strategic nuclear war, but, importantly, only insofar as it affected NATO.

The Athens speech was intended to stand on its own, but McNamara was so pleased with it that he asked for an unclassified version to be produced for an address to his Michigan alma mater, according to his assistant, Bill Kaufman. Kaufman claims that he refused to work on the Ann Arbor address because of the controversy he believed the Athens strategy would provoke if it were made public and taken out of its original intra-NATO context.

The Ann Arbor speech ultimately was crafted by Adam Yarmolinsky, whose views were more dovish than those of Kaufman. It was only a third as long as the Athens address, having been trimmed of classified information. Another key difference between the speeches was that Athens was specifically designed both to address and evade various NATO sensitivities. The Allies were accustomed to a NATO process in which all changes of military doctrine took a very long time. To get the doctrine of flexible nuclear response accepted by NATO, for example, took years. The same was true of the Athens speech, which was never fulfilled, particularly on the conventional side.

There were, however, several key similarities between the two speeches. In both, McNamara argued that, to the extent feasible, NATO should consider general nuclear war in much the same way that it approached more conventional military operations. NATO's principal military objective in both cases should be the destruction of the enemy's military forces. The speech at Athens went on to say that, under appropriate conditions, a nuclear strike confined to military targets on both sides might save 75 percent of the lives that would otherwise be lost in an offensive that combined an assured destruction attack plus counter force targets.

Equally important, and much more explosive in terms of the NATO reaction, was what Kaufman and McNamara called the "indivisibility of control" over nuclear weapons. In the Athens speech, McNamara argued, "It is for these reasons I've laid such stress on unity of planning, concentration of executive authority, and central direction." He ended this speech noting that, "Without them, general nuclear war means certain ruin. With them we have a chance of national survival."³ Small nuclear forces—like those

the British and French developed—were judged to be expensive, prone to obsolescence, and lacking credibility as a deterrent. By McNamara's standard of indivisibility of control, the British nuclear forces were less problematic than those of France, since the former were nominally integrated into America's SIOP by the presence of a British officer on Washington's joint strategic target and planning staff. The French, in contrast, were very proud of the independence of their nuclear deterrent and viewed McNamara's Athens speech as an assault on Gaullist military doctrine.

Somewhat more low-key was McNamara's attack on the Multi-Lateral Force (MLF) which was a proposal to create a force of medium range ballistic missiles in the custody of the European NATO member states that would be launched from ships jointly manned by all the NATO countries. The MLF excited great derision in the Pentagon. It originally was developed by Professor Klaus Nor, then on the State Department's planning staff, as a response to the growing European doubts about the credibility of NATO's type two deterrents. McNamara made clear his reservations about the MLF in the Athens speech. "On the multilateral Medium Range Ballistic Missile Force," McNamara noted, "we expect our allies will wish to consider very carefully the full implications of undertaking this venture."

Finally, the Athens speech culminated in a call for much larger conventional forces in Europe, which would have to be raised by the NATO allies. The conventional defense of Germany, which was not much more substantial than a tripwire, was to become a force capable of resisting Soviet Bloc attacks in order to void the question of escalation to the strategic nuclear level.

WHY THESE FORMULATIONS PROVED TO BE UNPOPULAR

Taken together, the Athens and Ann Arbor speeches constituted a major Pentagon strategic initiative. Yet, after the Ann Arbor address, none of McNamara's proposals attracted much public discussion or debate. There were still plans for limited options being prepared in the Pentagon, and there was ongoing work on the SIOP. But, if one considers General Odom's chapter in this volume, one can appreciate how limited the results of these efforts were.

Why, then, were the Athens and Ann Harbor suggestions set aside? Some of the most popular explanations are not very persuasive. The first reason that is most frequently proffered is Soviet opposition. Soviet objections to the Athens and Ann Arbor speeches were, of course, inevitable, given the relatively small size of Russia's nuclear forces. Yet, for all of Moscow's grumbling, the Russians did not conduct a major public relations campaign against the Athens doctrine like they did against Star Wars in the 1980s or the Pershing II and ground-launched cruise missile deployments in the 1970s and 1980s. As such, the Pentagon hoped that the Soviets' position would evolve, which indeed it did, albeit many, many years later.

The second popular explanation is European opposition, which certainly proved a headache for McNamara and the Kennedy administration. It flowed from the asymmetry of the damage World Wars I and II inflicted against Western Europe versus the United States. There remained, particularly in the U.S. Air Force, an enormous interest in fighting and winning a nuclear war, whereas in Europe, most officials were interested in deterring war. The most thoughtful European strategic analysts, like Raymond Aron, Healdy Bull, and Helmut Schmidt, were not unsympathetic to the Athens formulations. Instead, what worried them most was McNamara's demand for substantially greater military spending and a meaningful conventional force capable of defending Western Europe.

This European anxiety was best articulated by Raymond Aron in his book, *The Great Debate*. Aron argues that graduated response—another name for counter force and assured destruction alternatives plus the conventional defense of Western Europe—had a two-fold function. The first was deterrence, and the second was actual use. Graduated responses put emphasis on the use of tactical nuclear weapons and the incontestable need after the initiation of nuclear operations to avoid immediate escalation led most Europeans to believe that deterrence of nuclear war was, at best, a secondary objective of the new formulations.

In fact, Europeans viewed the Athens doctrine as being less effective as a nuclear deterrent than as a defense against nuclear hostilities in Europe spinning out of control into Soviet or American territories. Europeans certainly did not see the Athens formulations

as a means to restore the plausibility of the American nuclear deterrent for Western Europe. Instead, their deepest fear, of which the Office of the Secretary of Defense was profoundly aware, was that the Athens doctrine signaled an American withdrawal of its strategic nuclear guarantee to Western Europe. Washington, they feared, would substitute this guarantee with a conventional defense of Western Europe and a tacit agreement with Moscow to spare the American and Soviet heartlands from ever being targeted with nuclear arms.

With the massive nuclear forces and nuclear doctrines of the period, particularly on the Soviet side, European fears that only Europe would suffer if a general war broke out in their neighborhood were not very realistic, but they are easy to understand. Their anxiety in this regard was only aggravated by McNamara's attack on independent nuclear deterrent forces, which was a head-on confrontation with Britain and particularly France. Nevertheless, none of Europe's reservations against the Athens formulations had much impact in the short run because European officials tended either to go along with American strategic decisions or try to slow them down. The Kennedy administration certainly was more than willing to dictate to Europe. For example, Washington's unilateral cancellation of Skybolt, a major U.S.-UK cooperative air-launched ballistic missile project surprised Prime Minister McMillan at the Nassau Summit, undercut the defense policy of the conservatives in Britain, and gave ammunition to the Labor Party. Still, Kennedy stood by his decision, and the British gave way.

This, then, brings us to the real factors that unmistakably undercut support for the Athens doctrine. First, the weapons necessary to implement the Athens doctrine made the Office of the Secretary of Defense lose enthusiasm for its own proposal. After the Athens address, McNamara tasked the Services to specify what weapons would be needed to put it into practice. The results were quite substantial, particularly given McNamara's penchant for defining precise criteria for selecting and sizing U.S. weapons hardware and military forces.

To appreciate these requirements, it is essential to remember the climate at the time. There was considerable fear of nuclear war, constant development of new weapons, and highly publicized

Russian missile bluffs. The United States had difficulties launching a satellite after Sputnik, and the bomber gap, which had already been a brief sensation in the mid-1950s, was followed by the missile gap, which, in turn, was a major factor in the 1960 presidential election. Internal RAND documents during this period claimed that the chance of nuclear war occurring within 10 years was approximately 25 percent. Long-range ballistic missiles were just coming on line which fed the imaginations of weapons designers and the Air Force. Also, after Sputnik, fears of Soviet strategic nuclear weapons fed anxiety on the American side.

There was much more worry in the early 1960s about nuclear war and how to deal with it than there had been in the mid-1950s. The massive targeting routines that the Air Force and the other services were using in the 1960s exacerbated these fears. These targeting schemes were designed to assure a very high percentage of certainty that any given target would be destroyed. As a result, American military planners almost always had to allocate multiple weapons to any single target. With the poor accuracies of American ballistic missiles, the only sure way to guarantee the destruction of a hardened Soviet silo, even a relatively soft one, was to allocate 4 to 14 American missiles against it. The bulk of the strategic forces, moreover, still consisted of bombers. This created enormous demands for more weapons to suppress Soviet air defense bases, air defense interceptor aircraft, surface-to-air missile sites, and conventional anti-aircraft artillery batteries.

As a result, after McNamara's Athens address, there was a lot on the military's shopping list. The first item, which the Office of the Secretary of Defense found hard to swallow, was the RS-70 Bomber, which was a reconfiguration of the B-70 *Vulcan*. The bomber was an extremely high altitude manned plane that was supposed to fly above Soviet air defenses. After the Soviet destruction of Gary Power's U-2 in 1960, officials began to doubt that even the RS-70 could fly high enough. This fear produced a rapid American shift to using B-52 bombers that flew at sufficiently low altitudes to evade Soviet radar detection.

Beyond the RS-70, the U.S. Air Force and Army also requested a new version of the *Titan* intercontinental ballistic missile, the *Titan II*; a new solid intercontinental ballistic missile, the *Minute Man I*;

a new medium-range ballistic missile; the *Skybolt*, an air-launch intercontinental ballistic missile; and the *Nike-Zeus* anti-ballistic missile system.

ASSURED DESTRUCTION AND MAD

The price tag for the weapons on this wish list was frightfully large. What dampened enthusiasm for non-MAD strategic postures even further were a series of RAND studies done by Colonel (later General) Glen Kent in the Pentagon's deputy directorate of Defense Research and Engineering (DDR&E). These studies were published from July 1963 to January 1964 and applied systems analysis methods to evaluate various strategic nuclear postures in terms of American lives saved per dollar spent. For the purpose of these studies, Kent developed two accounting devices which were called "damage limiting," and "assured destruction." This is the formal origin of the term "assured destruction." The term was first used publicly in 1966 in the Defense Department's fiscal posture statement that was prepared in March 1965.

Many Air Force officers were angry at Kent because they thought his studies would kill support for counter force planning, and his work did tend to do this. The Athens formulations, after all, aimed to strengthen U.S. strategic nuclear deterrence and, in a narrow range of contingencies, to win wars. Yet these aims were not reflected in the criteria underlying Kent's studies. More important, complete limiting damage—the elimination of damage to one's society that might be caused by nuclear war—was impossible to achieve under the technical conditions that existed in the early 1960s. Any damage limitation scenario planners could paint had a terrible character.

Pentagon officials were frustrated in their efforts to justify spending on damage limiting measures. Each measure suggested was very expensive and produced improvements that were not very grand. Starting in Fiscal Year 1965, tables printed in the Defense Department's annual posture statements showed that, for each large increase of expenditure, the projected number of lives saved increased. The problem was the number of lives saved was unimpressive against the enormous projected number of casualties the United States would suffer even with the most expensive damage limiting capability in place.

Also, it turned out that civil defense was critical to make any of the damage limiting scenarios even nominally attractive. But McNamara was never able to get Congress to support a substantial civil defense program. As a result, damage limiting, as Kent defined it, was a concept that eventually destroyed itself. Once damage limitation became the key goal and metric of success, it undermined support for sparing cities and focusing exclusively on counterforce targets.

Finally, there were other technical feasibility problems. With the retirement of the B-47 bombers from the strategic inventory and the entry of large numbers of ballistic missiles, the combination of aims sought by the Athens statement was demanding. It was difficult enough to hit all of the counterforce targets such as Soviet arctic bases for the rebasing of Soviet bombers, surface-to-air missile sites, and the like. At the same time, it seemed impossible to avoid or minimize collateral damage to Soviet cities. This was true even though there was very little Soviet missile hardening. At every point, the lack of accurate weapons increased collateral damage not just against the Soviet Union, but the United States as well. It was estimated that a Soviet attack just on U.S. missile sites, many of them soft and therefore time-urgent targets for the Soviet strategic missiles and long-range aviation, would have inflicted very heavy damage to Denver, Colorado; Tucson, Arizona; Wichita, Kansas; Little Rock, Arkansas; Spokane, Washington; Abilene, Texas; Cheyenne, Wyoming; and Lincoln and Omaha, Nebraska. If one added U.S. strategic air command bases, *Polaris* ports, and command and control centers, the collateral damage was worse.

Finally, during the Kennedy and the Johnson administrations, the military's damage limiting shopping list was challenged by other non-nuclear priorities. These competing priorities included the urgent improvements required by conventional forces in Europe and later in Vietnam.

CONCLUSION: MAD'S HISTORICAL MOMENT

The doctrine that still survives under the name of MAD is the focus of considerable mythology. Today it is like the law of the Medes and the Persians, something eternal deriving from the very

nature of nuclear weapons. In fact, assured destruction emerged almost as an accident. It was a coincidence borne of the connection of several different eras. The first was World War II, which taught both the United States and the Soviet Union that the world is very dangerous and that nations should err on the side of being extremely well-armed. This view, and the Korean War, resulted in a three-fold increase in the U.S. defense budget, which, in turn, made the Athens shopping list conceivable.

The second was the post-World War II penchant of defense planners to rely on nuclear weapons. With Eisenhower's New Look defense posture, there was an almost exclusive reliance on nuclear weapons and, in the view of the Air Force, a dearth of available nuclear weapons. Beginning in the mid-1950's with the bomber gap, the launch of Sputnik, the Berlin Crisis, and Khrushchev's missile bluff, public and government fears of nuclear war made nuclear weapons more abundant. This only whetted the demands of the Air Force for more strategic weaponry.

America's strategic doctrine had to catch up with these rapid changes. It was only in 1956 that Albert Wohlstetter defined the preconditions of second-strike deterrents in the famous RAND study, R-290. And, it was only after President Kennedy entered office that the implications of RAND's thinking adequately worked out. From 1965 on, America's preoccupation with nuclear war receded, at least slightly. It became clear that the missile gap was a myth and, following the Cuban Missile Crisis, there was a period of détente with the Soviet Union. Next, the Vietnam War rapidly turned public attitudes against the military. This foreclosed the possibility of making expensive strategic changes or improvements that required substantial public support. MAD is another artifact of this rapidly changing set of circumstances. Like the superiority of the offensive learned from Napoleon, or the superiority of the defensive, which lasted from about 1915 until sometime in the 1930s, MAD was the product of a passing moment in history, one that will never again appear.

ENDNOTES - CHAPTER 4

1. This chapter is based on a study done originally in the middle of the 1970s at RAND. I wrote it together with the late Donald Fortier, who was tragically

taken away before he could fulfill his potential in the service of America's national security.

2. This statement is made in CNN's documentary, "Cold War," but it is not supported by substantial oral interviews.

3. Ann Arbor Address, p. 13.