

# The Search for an American Way of Nuclear Peace: The Eisenhower Administration Confronts Mutual Atomic Plenty

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## INTRODUCTION

The 1950s was a crucial period in the nuclear age during which the coexistence of the antagonistic nuclear powers became gradually institutionalized. The number of nuclear warheads possessed by the United States increased from about three hundred to twenty thousand during the decade, while the Soviet Union's arsenal grew from five warheads to two thousand. There were also great advances in the development of delivery vehicles. Both superpowers possessed substantial numbers of heavy bombers and a small number of operational ballistic missiles by the end of the decade. We cannot know whether and to what extent these weapons of mass destruction actually contributed to the prevention of major wars. However, the fact remains that both superpowers refrained from actually using these weapons, and mutual deterrence appeared generally stable. Later historians credit political leaders of the early nuclear age with establishing a non-use tradition of nuclear weapons, which constituted a pillar of the nuclear peace.<sup>1</sup>

The administration of President Dwight D. Eisenhower played an important role in shaping the basic contours of U.S. national security policy that was based on devastatingly powerful nuclear weapons as a deterrent. Many

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studies now praise President Eisenhower, who has come to be recognized as the dominant force within the administration, for a sound grasp of the essence of nuclear deterrence and a prudent recognition of the necessity of durable national security, especially the importance of striking a balance between a reliable military posture and a sound national economy. Generally, these studies pay considerable attention to the president's consistent resistance to the advocates, both within and outside the administration, of more conventional forces throughout his presidency and of more accelerated and expanded missile programs in the wake of the successful launch of *Sputnik* by the Soviet Union in late 1957. They extol his acumen and philosophy on national security for rejecting increases in these forces, which proved redundant in retrospect. Succinctly put, Eisenhower has been acclaimed for correctly predicting and actually bringing about a nuclear peace without draining American resources.<sup>2</sup>

The authors of these studies, however, pay only scant attention to more fundamental questions of how and why the United States took a course predicated on an assumption that the nuclear arms race was more likely to ensure its national security, and why it pursued a military posture that exposed its civilian population as a target of a potential Soviet nuclear onslaught. These are not speculative questions. For example, the Soviet Union chose for its part to develop a military posture that put more emphasis on the defense of its economy and population. Moreover, as historian Andreas Wenger has correctly pointed out, "during the first decade of the Cold War people did not expect the conflict between East and West to develop into a 'long peace'," and few "predicted that nuclear weapons would play a fundamentally stabilizing role in this process."<sup>3</sup> In other words, the American way of nuclear deterrence was not a foregone conclusion but a constructed policy sifted and fashioned out of several options.<sup>4</sup>

In this article I analyze the process that culminated in a military posture that disproportionately emphasized nuclear deterrence, focusing on President Eisenhower, the person at the heart of the process. I emphasize the existence of various streams of thought concerning what was then called "mutual atomic plenty" (hereafter MAP), a status in which the United States and the USSR would confront each other with large but unspecified numbers of nuclear weapons.<sup>5</sup> Analytical focus is placed on the ways and reasons certain streams were excluded as well as on those that prevailed, because the discarded options often vividly highlight the contours of a chosen policy. As a result, the Eisenhower who is revealed in this article is a shrewder and more manipulative leader, but one less prescient and consistent, than many recent

studies have depicted. Some arguments here may be reminiscent of those found in earlier studies that emphasize the economic factor as a crucial element that demarcated Eisenhower's national security policy.<sup>6</sup>

### I. THE CONUNDRUM OF MUTUAL ATOMIC PLENTY

The Soviet Union's successful detonation of its first atomic bomb in late August 1949 ushered in a new phase of the nuclear age. The subsequent deliberations on the part of U.S. policymakers gave birth to two conflicting streams of thought on a looming MAP. On the one hand, an optimistic stream emerged that envisaged that a greater nuclear arsenal would guarantee the national security of the United States into the MAP period. The administration of Harry S. Truman decided to promote the development of a hydrogen bomb based on assumptions typical of this stream of thought: U.S. nuclear superiority would serve as a strong deterrent to Soviet aggression, contribute to military victory should the Soviets initiate a war, and strengthen the political and diplomatic position of the United States.<sup>7</sup>

Shortly thereafter, another stream became conspicuous that took a pessimistic view on MAP. The voluminous policy paper submitted to the National Security Council (NSC) in April 1950, NSC 68, argued that nuclear superiority was necessary but not sufficient. As U.S. nuclear capabilities would gradually be balanced by Soviet counterparts, the United States, which heretofore had been spared the need for large conventional forces thanks to an atomic monopoly, should now embark on a massive conventional military buildup lest it "be confronted more frequently with the dilemma of reacting totally to a limited extension of Soviet control or of not reacting at all." Across-the-board military strength would serve "to deter war and to provide reasonable assurance, in the event of war, that it could survive the initial blow and go on to the eventual attainment of its objectives." Significantly, however, even this formidable military posture could not serve as a panacea in the long run since the "existence of two large atomic capabilities . . . might well act . . . not as a deterrent, but as an incitement of war." Essentially, NSC 68 considered MAP as inherently fraught with danger and instability. It therefore argued that superior U.S. military strength be fully utilized before the eventual arrival of MAP in ways designed to "support a firm policy intended to check and to roll back the Kremlin's drive for domination," and also "to reduce the power and influence of the Kremlin inside the Soviet Union and other areas under its control."<sup>8</sup>

As NSC 68 was approved in the wake of the outbreak of the Korean War,

its pessimistic outlook on MAP also became a predominant strategic assumption in official Washington. This situation had not changed substantially when Eisenhower assumed the presidency. For example, a report presented in January 1953 by an ad-hoc panel of consultants on disarmament, chaired by J. Robert Oppenheimer, proved one of the most foresighted strategic analyses of the day, but was clearly disinclined to consider that the United States would be better off under MAP. Its rational and judicious considerations on various aspects of the present and prospective nuclear arms race held out only the slight possibility that MAP might result in a “strange stability.”<sup>9</sup>

Eisenhower came into office with a firm conviction that national security required addressing dual threats: the external one of the Soviet Union and Communism and the internal one to the nation’s economic soundness, which he believed called for a balanced budget. He eloquently made clear his determination to rectify the previous administration’s deficit spending, which was due largely to a massive rearmament program under NSC 68.<sup>10</sup> Curiously enough, however, the president persistently evaded tackling the problem over which the strategic community agonized: how to comprehend and prepare for an approaching situation of MAP. In his first year as president, Eisenhower strived to establish a policy framework conducive to his fiscal philosophy while cautiously steering clear of strategic discussions that might derail his desired outcome.

As a first step toward the formulation of its first basic national security policy (BNSP), the administration launched a theoretical exercise, code-named Solarium, in which three alternative policy options—containment, declaration of a defense perimeter, and rollback—were studied by separate task forces. In fact, however, the Solarium exercise was contrived to lead to certain conclusions predetermined by the president.

First, an important alternative—*détente* with the Soviet Union—was dropped before the exercise was actually launched. This aborted fourth alternative was to consider “[w]hat kind of *détente* would provide a basis for a radical reduction in the threat of the Soviet Union and the United States to the security of the other” and, as a basis of analysis on this general problem, two related subquestions: “[w]hether and in what respects the relative security of the United States vis-à-vis the Soviet Union will inevitably decline with the passage of time,” and “[w]hat would be the impact of a general war on the basic national objectives of the United States” at certain time periods in the future.<sup>11</sup> In essence, this discarded alternative was to consider the implications of MAP and the wisdom of pursuing some form of *détente* to prevent its arrival. Consideration of the fourth alternative was ostensibly postponed until

a relevant intelligence report would become available, but it was never resuscitated thereafter.<sup>12</sup> This silent repudiation was remarkable considering that the possibility and desirability of *détente* was a subject of lively discussion in middle echelons of the Department of State.<sup>13</sup>

Second, the directive issued on June 1 to organize the three task forces and to assign each one of the policy alternatives came with a twist. Task Force A was to study the option of containment, but it was directed to stand on the assumption that “[t]ime can be used to the advantage of the free world. . . . Soviet power will deteriorate or relatively decline to a point which no longer constitutes a threat to the security of the United States and to world peace.”<sup>14</sup> It should be noted that the existing policy of containment was not predicated on such an optimistic view of MAP. On the other hand, the predominant pessimism on MAP was associated with the alternative assigned to Task Force C: a series of rollback efforts aimed at generating “a climate of victory” even if it involved “a substantial risk of general war.”<sup>15</sup> Certainly NSC 68 included some elements of rollback, and the previous administration had engaged in such operations in several regions.<sup>16</sup> But the basic framework of containment was firmly established after the failure to achieve rollback in Korea in autumn 1950. Evidently, the Solarium directive was devised to dissociate MAP pessimism from containment while discrediting it by associating it with an extreme version of rollback.

Finally, Eisenhower ostensibly avoided taking sides, but in fact chose alternative A, or containment associated with MAP optimism. At the end of the NSC meeting on July 16 in which the Solarium task forces made their presentations, the president observed “many similarities” among the task forces’ conclusions and directed that their “best features” be combined in preparation for BNSP, only to confuse participants, who naturally considered the alternatives A and C as simply incompatible.<sup>17</sup> Behind the scenes, however, Secretary of State John Foster Dulles and his right-hand man, Robert R. Bowie, director of the Policy Planning Staff, understood that Eisenhower actually preferred containment while discarding rollback, and proceeded to draft the BNSP on this understanding.<sup>18</sup> We can know nothing further about how the president wielded his “hidden-hand” leadership here, but the resultant BNSP, NSC 162/2, approved in late October, attests to the correctness of the understanding of Dulles and Bowie.<sup>19</sup>

Evidently, Eisenhower was determined to eliminate MAP pessimism as a basis of national security policy. Why then did he take such a roundabout approach, instead of, for example, explicitly declaring his own judgment as he had about fiscal policy? As Oppenheimer’s disarmament panel had already

shown, MAP optimism was far from a reasoned answer that could be deduced from the available intelligence or other objective observations. Rather, prudence seems to have driven many policymakers in the direction of MAP pessimism. Moreover, Eisenhower's MAP optimism was unsophisticated and instinctive rather than logical or systematic. During the course of deliberations by the NSC that culminated in the approval of NSC 162/2, Eisenhower only once definitely expressed his strategic outlook: "After all, deterring war was even more important than winning a war. No deterrent to war could compare in importance with this [nuclear] retaliatory striking power."<sup>20</sup> It must have been apparent that such a rudimentary optimism was not capable of quelling a widespread and deep-rooted MAP pessimism. Nevertheless, Eisenhower was determined that defense expenditures could and should be reduced by putting more emphasis on nuclear weapons to the detriment of conventional forces. This required replacing MAP pessimism with MAP optimism as the basic strategic outlook on which the actual military posture would be predicated. Thus, Eisenhower chose not to debate the issue but to circumvent it altogether.

By exercising such a manipulative decision-making procedure, however, Eisenhower failed to forge a consensual strategic outlook. The Joint Chiefs of Staff (JCS), chaired by Admiral Arthur Radford, resisted the president's designs, arguing that a budget cut would inevitably lead to a proportionate deterioration of national security.<sup>21</sup> Moreover, the JCS became wedded to the stream of thought favoring rollback, which emphasized the limited time period before the arrival of MAP.<sup>22</sup> Only after Eisenhower forcefully dictated a deep cut in the defense budget through a substantial reduction of military personnel in mid-November did the JCS accept the cutback through nuclearization.<sup>23</sup> However, his decisive leadership stopped far short of converting MAP pessimists.

The conflict between MAP optimism and pessimism came to the surface as a series of events in 1954 appeared to drive the United States into a corner. The French debacle in Indochina, along with Britain's reluctance to intervene to salvage its beleaguered ally, seemed to signify weakening of the cohesion of the Western alliance. The moribund European Defense Community, which the administration still deemed indispensable for Western strength, approached its demise. The United States was criticized internationally for its nuclear test at Bikini Atoll in March that severely injured Japanese fishermen and inhabitants of the Marshall Islands. This led India to submit a proposal before the United Nations Disarmament Commission to halt all nuclear tests.<sup>24</sup> The administration found the proposal worth consideration since its

acceptance might have propaganda value and reassure the allies, whom Secretary Dulles observed were scared of an approaching MAP, while freezing U.S. nuclear superiority.<sup>25</sup> Eventually, however, the administration, in late June, decided not to go along with the test-ban proposal on the grounds that potential risks, such as probable difficulty in test resumption, surpassed possible gains.<sup>26</sup>

This temporary tilt by the highest policymakers toward détente, combined with the general sense that the administration's overall strategy was failing, unleashed centrifugal forces originating from MAP pessimism. The JCS, adamantly opposed to a test ban, argued that the United States should launch more "positive" actions, which would be calculated to put greater pressure on the Soviet Union before the arrival of MAP, and reverse the cutback of conventional forces, which would be increasingly needed as MAP approached. The JCS, resuscitating Solarium's rollback alternative, now went so far as to suggest the possibility of preventive war against the USSR.<sup>27</sup>

In the meantime, officials in the State Department continued their own deliberations on the long-term implications of MAP.<sup>28</sup> The general answer seemed to be that MAP would bring about a period characterized by instability in which both the cohesion of the alliance and the living standard of the peoples in the free world would be difficult to sustain.<sup>29</sup> While tacitly sympathizing with the JCS's overall concern about MAP, and even with their call for more conventional forces, the State Department was more apprehensive about MAP's detrimental effects in the political and diplomatic field, and thus averse to the JCS's bellicose stance. The department began to consider the continuation of the nuclear arms race so risky that some form of disarmament should be pursued.<sup>30</sup>

As the two most influential departments, both motivated by MAP pessimism, tried to pull the basic line of national security policy in opposite directions, the support for the existing policy grew thinner.<sup>31</sup> No room for maneuver was left to the president as there had been in the previous year. Eisenhower repeated his conviction that the "more atomic weapons each side obtains, the more anxious it will be to use these weapons."<sup>32</sup> Clearly recognizing, however, that this rudimentary optimism would not calm the MAP pessimists, he tried to convert them by reiterating his conviction that the United States would be able to win any war even after MAP arrived.

At the base of Eisenhower's argument was his firm conviction that the United States could prevail as long as its industrial capacity and mobilization base were kept intact. This tenet led the president to retreat unofficially from the rigid governmental position on arms control that linked nuclear and con-

ventional disarmament, and to become receptive to an exclusively nuclear disarmament that might assure the survival of a U.S. mobilization base should a general war come about.<sup>33</sup> Eisenhower envisioned a future general war consisting of two phases: an initial phase of intensive nuclear exchanges followed by an extended period of mobilization for a lengthy war. He declared before the NSC, “We should have the capability so far as possible of warding off destructive enemy attack and as quickly as possible ourselves to be able to destroy the war potential of the enemy. After these initial moves in a future war, the United States might have to contemplate a 12-year mobilization program to achieve final victory in the war.”<sup>34</sup> As for cases of local aggression, the United States “had to depend on the indigenous victims of aggression for some time of fighting,” and could thereafter send in “Marines and the Air Forces.”<sup>35</sup> At a meeting with the service chiefs, the president again postulated a war in which “phase one would be the aversion of disaster; in phase two we would go on to win the war.” Significantly, he went so far as to indicate his “firm intention to launch a strategic air force immediately in case of alert of actual attack” and observe that “the tactical atomic weapons can be used effectively to protect our forces.”<sup>36</sup>

It was natural that none disputed the importance of war-fighting capability, considering that the fear of losing it in the future had driven many to MAP pessimism. To Eisenhower’s chagrin, however, few MAP pessimists seemed converted by his argument, since many believed the president’s design would at best be valid only for a brief period in the near future. The JCS kept on arguing for more “dynamic and positive” measures, because, as Radford put it, the chiefs could only guarantee that “in a limited or a full-scale war, the outcome for the United States, *prior to Soviet achievement of atomic plenty*, would be successful” (emphasis in original).<sup>37</sup>

On the other hand, the State Department became more inclined toward disarmament. The department effectively dismissed the president’s argument, considering mutual deterrence as “fragile,” since it would have to be “based upon uncertain checks and balances,” and maintaining that at some point initial nuclear exchanges would at best cripple the U.S. mobilization base or at worst might imperil “the survival of civilization.”<sup>38</sup> The Policy Planning Staff developed a four-phased disarmament plan, starting with the establishment of a somewhat lax inspection regime acceptable to both sides, and developing, through what would later come to be called a confidence-building process, into successive phases in which substantial reduction of nuclear and conventional armaments, accompanied with a more comprehensive inspection regime, would be accomplished.<sup>39</sup>



However, by the end of 1954, MAP pessimists were rapidly marginalized. The international environment turned favorably for the free world. After the demise of the European Defense Community, Western Europeans devised a scheme for West Germany's rearmament and its accession to NATO. The West had salvaged the southern half of Vietnam and established the Southeast Asia Treaty Organization to guarantee against further Communist advance in Indochina. Secretary Dulles, who in the summer supported a fundamental reappraisal of BNSP, no longer deemed drastic revisions necessary. He strongly dismissed the rollback alternative, which, he pointed out, would alienate allies and increase the risk of general war but "would not touch the heart of the problem of Soviet atomic capabilities," even if it might successfully disintegrate the Soviet bloc. Dulles's cogent justification for his own conversion set the tone of the NSC discussions, and effectively doomed the rollback option as a viable strategic alternative.<sup>40</sup>

Concurrently, disarmament was also being discarded as a policy option. The momentum within the State Department to fundamentally revise the existing framework of the BNSP gradually waned. The Policy Planning Staff wildly vacillated between two conflicting observations: that MAP "could be no real peace" because "[m]utual deterrence could be upset by a madman," and that "[i]f we should reduce or eliminate our dependence on nuclear weapons this deterrence would be largely lost." It finally concluded, somewhat uneasily, that "our present policies of military and economic strength for ourselves and our allies . . . are the best that can be devised to deal with the Soviet menace."<sup>41</sup> By late December, Dulles stood firmly against disarmament.<sup>42</sup> In addition, the military remained opposed to any disarmament that did not accompany an unrealistically strict system of inspection from the outset.<sup>43</sup>

In early 1955, the president effectively intervened to put an end to the interdepartmental conflict, and instead designated a special assistant in charge of disarmament policy. By this time, however, Eisenhower's interest in disarmament markedly declined, as he reverted to his previous position that echoed official policy linking nuclear with conventional disarmament. He now considered disarmament as a means to "achieve a stalemate vis-à-vis the Russians in the area of the non-military struggle as we have already achieved such a stalemate in the military field."<sup>44</sup> Disarmament was subtly relegated to a propaganda measure.<sup>45</sup>

Now that MAP pessimism was again neutralized, the administration considered MAP something to be taken on, rather than evaded. However, the fundamental problem of how to secure national security under MAP re-

mained unresolved.

## II. METAMORPHOSIS OF DEFENSE

As observed in the previous section, policymakers in the early 1950s were not free from the conception that war-fighting capability served as the basis of national security. Survival of the United States as a viable political, social, and economic entity was considered both the means for pursuing and ends resulting from a future war. Such a war-fighting capability was invariably, though not always explicitly, linked with the credibility of deterrence. This explains why there was consensus among policymakers as well as scientists on the need for an effective defense of the continental United States—Solarium task forces A and C as well as Oppenheimer’s disarmament panel all recommended it.<sup>46</sup>

NSC 162/2 deemed an “integrated and effective [North American] continental defense system” an indispensable element to “deter and, if necessary, to counter Soviet military aggression.” For this purpose the continental defense had to “protect our striking force, our mobilization base, and our people” in the event of war.<sup>47</sup> When the NSC discussed the administration’s first policy statement on continental defense in autumn 1953, Eisenhower endorsed a greatly expanded continental defense program, while cautiously warning against the tendency “to underestimate the difficulties which the USSR would encounter in making an attack upon the continental United States.”<sup>48</sup> The optimism about technological advances also characterized the early discussions on continental defense. A perfect defense was ruled out from the outset as “impractical, economically and technically,” but “a reasonably effective defense system” that could prevent the Soviets from attaining “the net capability of destroying the war-making capacity of the United States” was considered well within reach.<sup>49</sup> In short, continental defense was expected to extend the period during which the United States could predicate its national security on its war-fighting capability that was taken for granted before the arrival of MAP.

The continental defense consisted of a wide variety of programs including, *inter alia*, radar and early warning systems, active defense by fighter-interceptor and other anti-aircraft forces, and passive defense measures including emergency evacuation of the federal government and the civilian population. The updated NSC policy on continental defense, NSC 5408, approved in February 1954, endorsed a budgetary increase for these and other programs. Though the sum allotted to continental defense was relatively small—about

\$3.3 billion out of a \$45-billion total national security budget for fiscal year 1955—the gradual increase was remarkable considering that the total national security budget was continuously compressed.<sup>50</sup> In December 1954, Eisenhower indicated his views “that increased emphasis should be given to measures for continental defense” along with technological advances and the construction of an invulnerable mobilization base.<sup>51</sup>

Persisting concerns about MAP, however, suggest that there was a widely shared sense that the planned continental defense might be insufficient. Particularly troubling was the possibility of a Soviet surprise attack that might well cripple the mobilization base and negate the superior nuclear forces of the United States.<sup>52</sup> A comprehensive prescription for this problem was provided by outside specialists gathered at the Technological Capabilities Panel (TCP) of the Science Advisory Committee of the Office of Defense Mobilization, chaired by James R. Killian Jr. The TCP report, submitted in February 1955, emphasized the importance of U.S. nuclear retaliatory forces that could survive a Soviet surprise attack. Specifically, the panel urged the administration to reduce the ground vulnerability of the Strategic Air Command (SAC) bombers through their dispersal and improvement of their alert status, and recommended the promotion of the development of intercontinental and intermediate-range ballistic missiles (ICBM/IRBMs). In retrospect, the report seems to have provided a blueprint for the military posture that the United States actually employed *during* the MAP period.<sup>53</sup>

In fact, however, the panel derived its findings from assumptions of classical MAP pessimism. The report considered MAP highly dangerous, and urged the administration to “push all promising technological development” so that the United States could retain, and regain if necessary, the strategic position vis-à-vis the USSR that existed *before* the arrival of MAP. Significantly, the report assumed a war-fighting capability to be a sine qua non for an effective deterrent to Soviet surprise attack. This was evident in its recommendations on continental defense, which stated that various defensive measures should, in the event of war, protect “our retaliatory power as well as our people and our cities.” Moreover, the panel optimistically observed that the basic technological problems posed by manned bombers had almost been solved, and even the attainment of means to counter the ICBMs appeared “sufficiently promising.” Accordingly, the panel recommended a panoply of measures that were expected to improve the continental defense capability, including a vast expansion of various radar and alert systems, development and improvement of active defense weapons, and accelerated research and planning for civil defense measures.<sup>54</sup>

The administration favorably received the TCP report. Though Eisenhower and Dulles swiftly discerned and dismissed the MAP pessimism underlying the report, the administration endorsed a large part of its specific recommendations after reviewing them item by item. This meant that the administration envisioned a military posture calculated to assure war-fighting capability into the MAP period.<sup>55</sup>

Nevertheless, the goals of the military posture did not remain unchanged. By the end of the year the administration decided to give “the highest priority above all others” to both ICBM and IRBM development programs.<sup>56</sup> Before these decisions were taken, Eisenhower had made it clear that he considered these missiles as “a threat and a deterrent” rather than war-fighting weapons. He recognized “the profound and overriding political and psychological importance of the U.S. achieving such a weapon,” but remained “somewhat skeptical . . . of the unique importance of the ICBM from a strictly military point of view.”<sup>57</sup> The United States was adding weapons systems that would serve exclusively for the purpose of deterrence. This, however, in no way meant that war-fighting capability was abandoned. When the NSC considered a progress report on continental defense in mid-1955, Eisenhower commented that reassessment of its specific programs should be carried out according to “our great objective . . . (a) to avert disaster, and (b) to win the war, if it comes.”<sup>58</sup>

However, the administration gradually discarded war-fighting capability as a goal of its military posture after 1956. The first symptom could be perceived in January 1956, when the Net Evaluation Subcommittee (NESC) made a great upward revision of the estimate of the prospective damage that would be incurred by the United States in the event of a general nuclear war. The NESC report presented a chilling picture of the “total collapse” of the United States as a political and economic entity. Even a month of strategic warning and defensive measures taken in the meantime would make “no significant difference in the losses we would take.” Deeply shocked, Eisenhower confided to his diary that the only answer would be “a surprise attack against the Soviets,” which, however, he considered was “against our tradition” and politically impossible.<sup>59</sup> Ironically, however, the president apparently realized that the horrendous estimate provided him with ammunition to reinforce his rudimentary MAP optimism. The president now contended more confidently than before that a formidable nuclear retaliatory capability would deter the USSR from resorting to both general and limited wars.<sup>60</sup> He further argued that the Soviets would have “conducted exercises similar to the NESC study,” and “we had to give them credit for having some sense.”<sup>61</sup>

However, considering that Eisenhower had consistently pursued a war-fighting capability while placing great confidence in the value of nuclear retaliatory capability, it is inconceivable that such an estimate alone, however upsetting, could have forced him to abruptly renounce war-fighting capability. Actually, it was only after the rising cost of sustaining a war-fighting capability became apparent that he began to abandon it. In June, the NSC considered a new continental defense policy, NSC 5606. The document was in no way innovative in content. Its stated objective duplicated almost verbatim its predecessor, NSC 5408. Most specific policies delineated within it had originally been recommended in the TCP report and were already acted on by the NSC. Nevertheless, the document proved highly disquieting because of its financial estimate, which stated that the approximately \$3-billion continental defense expenditure in fiscal year 1955 would increase to \$11.5 billion in 1960, due largely to the rising cost of countervailing new offensive weapons, including ballistic missiles, and of covering newly added programs such as shelters to protect the civilian population.<sup>62</sup>

Budget-conscious members of the administration denounced the “terrific jump in expenditures,” and Eisenhower quietly stood behind them. In August, he buried NSC 5606, rhetorically asking “how far we could go until we reached a state of complete futility.”<sup>63</sup> The primacy of budgetary considerations also became evident when the Science Advisory Committee offered to initiate a special study on “the allocation of technical and economic resources for national security,” aiming at streamlining various weapons systems and their development programs to restrain expenditures including those for continental defense. Eisenhower “with a wry smile” responded negatively, indicating his belief that scientists would come to “a very finite conclusion which inevitably added up to a great expenditure of money.”<sup>64</sup>

Clearly, Eisenhower neither anticipated the enormity of destruction ensuing from an all-out nuclear war nor the magnitude of the cost required for an effective continental defense. But, by the end of 1956, he found that these two intractable problems could be solved by combining them. He began to use the horrible damage estimations to justify his retreat from his former position on war-fighting capability. When the NESC presented an even gloomier estimate in December 1956, the president stated that the United States should not “put a single nickel into anything but” developing nuclear retaliatory capability.<sup>65</sup> As previous studies have pointed out, Eisenhower had a hard time silencing the conventional-force advocates concerned about the loss of nonnuclear, limited-war-fighting capabilities.<sup>66</sup> In contrast, his rationale for the retreat from an effective continental defense was accepted rather

easily. At an NSC meeting the next year, the JSC, which had been supportive of NSC 5606, expressed its acceptance of “a very drastic reduction in the current level of expenditure for continental defense in order to provide and maintain our offensive capabilities.”<sup>67</sup>

The retreat from war-fighting capability became further apparent when the Federal Civil Defense Administration proposed a comprehensive blast and fallout shelter program with a price tag of \$32 billion over eight years, along with the plausible justification that it would save “millions of lives” and “could make the difference between the survival of the nation and its disintegration.” Dulles simply found the cost exorbitant, and argued that the United States “would obtain a much more effective defensive capability” if that money was “used to increase our deterrent military capabilities.” The NSC deferred a decision on the shelter program until an outside specialists’ study on the protection of the civil population became available.<sup>68</sup>

The resultant Gaither report of November 1957 worked as a catalyst to consolidate the already evident shift toward a nuclear deterrence posture devoid of war-fighting capability. The report, albeit tinged with partisan criticism against the administration, can be understood as an updated version of the TCP report, since it was firmly anchored in MAP pessimism, and recommended a wide range of measures focused on war-fighting capabilities, which would cost an additional \$44 billion over five years.<sup>69</sup> Thus, the administration’s negative response shows how far its concept of military posture had changed from that of three years before. Eisenhower, while agreeing with several specific recommendations, rejected the report as a whole, succinctly stating that “maximum massive retaliation remains the crux of our defense” and “what we put into defense measures should be put into the security of our striking forces.”<sup>70</sup> Early the next year, the administration rebuffed a large-scale shelter program recommended in the Gaither report. The protection of the civilian population would be continuously pursued chiefly through emergency evacuation of urban populations, whose effectiveness was at best questionable.<sup>71</sup> Soon the administration approved a new continental defense policy, NSC 5802/1. Most significantly, the scope of continental defense was substantially narrowed to “the protection of that element of our retaliatory capability based on the North American Continent.” Continental defense ceased to be protective measures that would assure the survival of the nation and became just ancillary to nuclear retaliatory forces.<sup>72</sup>

The administration ended up with a formidable military posture, which included around twenty thousand nuclear warheads, the first ICBM as well as several IRBM systems, SAC bombers sufficiently dispersed on greatly im-

proved alert status, and radar systems running from Midway through the northernmost rim of the North American Continent to the Azores.<sup>73</sup> However, the people of the United States could enjoy this relatively inexpensive peace only by exposing themselves as potential targets of an expanding Soviet nuclear arsenal. Naturally, the president could not tell the people that they should trust the Soviet leadership, even though he credited it with being as rational as its American counterpart. He had to look to other ways to keep the general public calm.

### CONCLUSION

Eisenhower turned out to be an exceptionally shrewd leader who skillfully molded national security policy according to his own vision. However, he was not as prescient as suggested in many recent studies, even though his instinctive prediction that MAP would bring about strategic stability proved correct. The war-fighting capability, which he had undeniably considered the prerequisite to reliable deterrence, proved unattainable as long as he adhered to his budgetary philosophy. It has also become apparent that Eisenhower foreclosed the possibility that *détente* and disarmament might be pursued as a means to secure national security early in his administration. The fact that he became more positively disposed to a test-ban agreement after 1958 must be seen in this context,<sup>74</sup> since it in no way challenged the fundamental assumption that an enormous nuclear arsenal would assure national security into the future.

One can still credit Eisenhower with achieving peace at relatively small cost and even for adapting himself flexibly to changing circumstances. However, his leadership style as well as the contents of his national security policy entailed certain costs. Eisenhower generally succeeded more in silencing rather than converting the opposition. The consensus within the administration remained fragile and did not extend far beyond the White House lawn. More seriously, the general public was completely excluded from the fundamental decisions concerning nuclear strategy.

In fact, Eisenhower looked in vain for a way to convey his strategic outlook to the public. In its first year, the administration contemplated launching a public relations campaign code-named Operation Candor, aimed at creating an "informed public" on the reality and basic governmental policy regarding nuclear plenty. However, Eisenhower soon abandoned the original concept, which he realized might well only scare the public.<sup>75</sup> A candid presentation became all the more difficult as the nuclear strategy took on a potentially

more destructive nature. The intractable dilemma was concisely summarized by the president: “We want to avoid hysteria on one side and complacency on the other.”<sup>76</sup> The administration, unable to find a single satisfactory answer, saw a partial way out in the civil defense programs, which aimed to create a disciplined public imbued with the belief in survival in a nuclear catastrophe.<sup>77</sup>

Whether and to what extent these programs affected the disposition of the public in the 1950s is beyond the scope of this article. In any case, the general public turned out to be docile in that it never posed fundamental questions about the wisdom of nuclear deterrence. Historian Spencer R. Weart has argued that the majority of the public chose to believe that “there was little chance of a nuclear war actually happening soon” in order to make their “nuclear fear” compatible with the inability to deal with its cause. The public, learning and taught “helplessness,” retreated into apathy.<sup>78</sup> Nuclear peace thus emerged as a collaborative product of an administration that evaded discussions and a public that chose not to face a potentially abhorrent reality. In this sense, the largest cost accruing from the nuclear peace was incurred by the American democracy, which President Eisenhower had pledged to defend.

#### NOTES

<sup>1</sup> John L. Gaddis, *The Long Peace: Inquiries into the History of the Cold War* (New York: Oxford UP, 1987), chaps. 5 and 8; McGeorge Bundy, *Danger and Survival: Choices about the Bomb in the First Fifty Years* (New York: Random House, 1988), chaps. 6–7.

<sup>2</sup> John L. Gaddis, *Strategies of Containment: A Critical Appraisal of Postwar American National Security Policy* (New York: Oxford UP, 1982) emphasizes Eisenhower’s sound grasp of the means-ends relationship, and praises the cost effectiveness of his strategy. Richard H. Immerman, “Confessions of an Eisenhower Revisionist: An Agonizing Reappraisal,” *Diplomatic History* 14, no.3 (Summer 1990): 319–42, applauds Eisenhower’s “intellectual acuity and perspicacity” rather than his budgetary philosophy as a basis of his strategy. Many later works have enriched and partially revised the theses developed in these earlier studies, but all seem to have ultimately reinforced them. See, for example, Peter J. Roman, *Eisenhower and the Missile Gap* (Ithaca, NY: Cornell UP, 1995); Saki Dockrill, *Eisenhower’s New-Look National Security Policy, 1953–1961* (Basingstoke: Macmillan, 1996); John L. Gaddis, *We Now Know: Rethinking Cold War History* (New York: Oxford UP, 1997); Campbell Craig, *Destroying the Village: Eisenhower and Thermonuclear War* (New York: Columbia UP, 1998); Robert R. Bowie and Richard H. Immerman, *Waging Peace: How Eisenhower Shaped an Enduring Cold War Strategy* (New York: Oxford UP, 1998).

<sup>3</sup> Andreas Wenger, *Living with Peril: Eisenhower, Kennedy, and Nuclear Weapons* (Lanham, MD: Rowman and Littlefield, 1997), 2–6. I have been greatly influenced by Wenger’s argument and his basic approach of analyzing “streams of thought,” but my definition of the streams differs from his.

<sup>4</sup> David Goldfisher, *The Best Defense: Policy Alternatives for U.S. Nuclear Security from*



*the 1950s to the 1990s* (Ithaca, NY: Cornell UP, 1993) provides a thought-provoking analysis that there was a safer, but always renounced, path of nuclear strategy that emphasized defense combined with gradual disarmament.

<sup>5</sup> “Mutual atomic plenty” and “atomic/nuclear plenty” are phrases that were commonly used by U.S. policymakers in the 1950s. Without clear definitions, these phrases ambiguously depicted the prospective strategic conditions that would accrue from an unchecked nuclear arms race. Thus, “mutual atomic plenty” included a condition that was conceptualized in the following decades as “mutual assured destruction,” but did not exclude the possibility that either side might acquire first-strike capability.

<sup>6</sup> Glenn H. Snyder, “The ‘New Look’ of 1953,” in Warner R. Schilling, et. al., *Strategy, Politics, and Defense Budgets* (New York: Columbia UP, 1962); H. W. Brands, “The Age of Vulnerability: Eisenhower and the National Insecurity State,” *American Historical Review* 94, no. 4 (Oct. 1989): 963–89; Gaddis, *Strategies*, chaps. 5–6.

<sup>7</sup> *Foreign Relations of the United States* (hereafter *FRUS*), 1950, 1: 503–11, 513–23.

<sup>8</sup> *FRUS*, 1950, 1: 234–92. Quotations are from 266, 278, 283–84, 287–88.

<sup>9</sup> *FRUS*, 1952–1954, 2: 1056–91.

<sup>10</sup> Bowie and Immerman, *Waging Peace*, chap. 6.

<sup>11</sup> Memorandum starting with “(1) The policy of the United States would be to seek to bring about a detente with the Soviet Union,” undated, in “Review of U.S. Basic National Security Policy, NSC 153–162, June–Aug. 1953” folder (hereafter “BNSP June–Aug.” folder), Lot 64 D 563, RG 59 (hereafter PPS1953 files), National Archives, College Park, MD (hereafter NARA).

<sup>12</sup> Memorandum by Robert Amory for Walter B. Smith, Allen W. Dulles, and Robert Cutler, “Project ‘Solarium,’” July 8, 1953, in *Declassified Documents Reference System* (hereafter *DDRS*), CK3100274817, declassified Mar. 27, 1989.

<sup>13</sup> Memorandum by C. Savage, “General Lines of U.S. Foreign Policy,” May 25, 1953, in “BNSP June–Aug.” folder, PPS1953 files; Memorandum by Charles C. Stelle, “Alternative Possible General Lines of U.S. Foreign Policy,” May 22, 1953, in the same folder.

<sup>14</sup> *FRUS*, 1952–1954, 2: 360–66.

<sup>15</sup> A Report to the National Security Council by Task Force “C” of Project Solarium, July 16, 1953, in *DDRS*, CK3100243704, declassified Apr. 16, 1987.

<sup>16</sup> Raymond L. Garthoff, *Assessing the Adversary: Estimates by the Eisenhower Administration of Soviet Intentions and Capabilities* (Washington, DC: Brookings Institution, 1991), 16.

<sup>17</sup> *FRUS*, 1952–1954, 2: 397–98, 440–41.

<sup>18</sup> Memorandum by Robert Bowie, untitled, July 18, 1953, in “BNSP June–Aug.” folder, PPS1953 files; Memorandum by Robert Bowie, untitled, Aug. 15, 1953, in the same folder; Memorandum from John F. Dulles to Bowie, Aug. 1, 1953, in “Review of U.S. Basic National Security Policy, NSC 153–162, Sept.–Dec. 1953” folder, PPS1953 files. See also Bowie and Immerman, *Waging Peace*, 127.

<sup>19</sup> *FRUS*, 1952–1954, 2: 577–97.

<sup>20</sup> *FRUS*, 1952–1954, 2: 572.

<sup>21</sup> Memorandum by the Joint Chiefs of Staff to the Secretary of Defense, Aug. 8, 1953, in “NSC 162/2 (1)” folder, Disaster files, White House Office, National Security Council Staff Paper, Dwight D. Eisenhower Library (hereafter DDEL).

<sup>22</sup> Memorandum titled “General Consideration,” (hand-written notation reads “Bonesteel (Defense) 8/53”), undated, in “BNSP June–Aug.” folder, PPS1953 files; Memorandum from Arthur Radford to the Secretary of Defense, Oct. 6, 1953, in “NSC 162/2 (1)” folder, Disaster files, DDEL.

<sup>23</sup> *FRUS*, 1952–1954, 2: 597–98; Memorandum from Arthur Radford to the Secretary of Defense, Dec. 9, 1953, in “NSC 162/2 (2)” folder, Disaster files, DDEL; Discussion at the

176th Meeting of the National Security Council, December 16, 1953, DDEL.

<sup>24</sup> *Documents on Disarmament, 1945–1959* (Washington, DC: USGPO, 1960): 408–11, 412–13.

<sup>25</sup> *FRUS, 1952–1954, 2: 1419–20.*

<sup>26</sup> *FRUS, 1952–1954, 2: 1423–29, 1463–67, 1467–72.*

<sup>27</sup> *FRUS, 1952–1954, 2: 672–75, 680–86.* See also Marc Trachtenberg, *History and Strategy* (Princeton, NJ: Princeton UP, 1991), 141–46; Wenger, *Living with Peril*, 65–69. Garthoff plausibly argues that these “positive” actions included a scheme to take the control of Soviet air space as a precondition for sending ultimatums to the Russians. See Garthoff, *Assessing the Adversary* 22–23. See also Tami Davis Biddle, “Handling the Soviet Threat: ‘Project Control’ and the Debate on American Strategy in the Early Cold War Years,” *Journal of Strategic Studies* 12 (Sept. 1989): 273–302.

<sup>28</sup> Memorandum by Edmund Gullion, “Outline for Proposed Inter-Departmental Study of the Probable Security Position of the United States in 1959 as Compared to the Present,” April 13, 1954, in “Staff Papers on NSC 5422” folder, Lot 65 D 101, RG 59, NARA (hereafter PPS1954 files); Memorandum from Henry Owen to Bowie, “S/P Consideration of US Military and Disarmament Policy,” Sept. 2, 1954, in “Atomic Energy-Armaments” folder, PPS1954 files.

<sup>29</sup> Memorandum by C. Savage on “The United States, 1954–1959: Political and Psychological Factors Which May Affect the World Situation,” Apr. 12, 1954, in “Staff Papers on NSC 5422” folder, PPS1954 files; Memorandum by R. Bowie, starting with “Trends in the Free World,” June 9, 1954, in the same folder.

<sup>30</sup> Memorandum starting with “Summary and Conclusions,” undated, in “Staff Papers on NSC 5422” folder, PPS1954 files; Memorandum from Henry Owen to Bowie on “Swords into Ploughshares and . . . Spears into Pruning Hooks,” Apr. 16, 1954, in “Atomic Energy-Armaments 1954” folder, PPS1954 files.

<sup>31</sup> Documents prepared for NSC meetings in June show that options of “[p]reventive war or confrontation” and “arms control” were considered alternatives to the existing policy, but the NSC Planning Board could not decide “whether the growing nuclear capability of the USSR can be dealt with by means of an agreement to limit armament.” Memorandum titled “Check List of Principal Issues Raised by ‘Guideline Studies,’” June 7, 1954, in “NSC 5422/2 (1)” folder, Disaster files, DDEL; Memorandum titled “NSC 5422 ‘Tentative Guidelines under NSC 162/2 for FY 1956,’” June 14, 1954, in the same folder.

<sup>32</sup> *FRUS, 1952–1954, 2: 689.*

<sup>33</sup> *FRUS, 1952–1954, 2: 1342–43, 1467–72.*

<sup>34</sup> *FRUS, 1952–1954, 2: 689.*

<sup>35</sup> *FRUS, 1952–1954, 2: 708–09.*

<sup>36</sup> Memorandum of Conference with the President, December 22, 1954, in “Military Programs (4)” folder, Disaster files, DDEL. Eisenhower’s statement was undoubtedly serious. NATO had already adopted a military strategy that envisaged a war that closely paralleled his two-phased-war concept. According to this strategy, the defense of Western Europe would be realized only by a massive and instant salvo of nuclear weapons against the USSR at the outset of a war. See Report by the North Atlantic Military Committee, M.C. 48 (FINAL), “The Most Effective Pattern of NATO Military Strength for the Next Few Years,” Nov. 22, 1954, available at NATO official website, <http://www.nato.int/docu/stratdoc/eng/a541122a.pdf>; Marc Trachtenberg, *A Constructed Peace: The Making of the European Settlement, 1945–1963* (Princeton, NJ: Princeton UP, 1999), 156–78.

<sup>37</sup> *FRUS, 1952–1954, 2: 785–87, 791–92.*

<sup>38</sup> Memorandum from Edmund A. Gullion to Bowie on “A New Disarmament Proposal I,” Oct. 15, 1954, in “Atomic Energy-Armaments 1954” folder, PPS1954 files; Talking Paper No.

2 for Planning Board Meeting, Oct. 15, 1954, in the same folder.

<sup>39</sup> Memorandum from Robert Bowie to the Secretary, on "Status Report on NSC Agenda Item 4—U.S. Position with Respect to Arms Reduction," Oct. 27, 1954, in "NSC 112" folder, Lot 66 D 95, RG59, NARA; Memorandum by State Working Group on "Review of U.S. Policy on Control of Armaments," Nov. 29, 1954, in the same folder.

<sup>40</sup> *FRUS*, 1952–1954, 2: 788–91, 833–34.

<sup>41</sup> PPS Meetings, Oct. 14, 19, 26, and Nov. 16, 1954, in "S/P Meetings" folder, PPS1954 files; Memorandum from L. W. Fuller to Bowie on "Outline of a National Security Policy," Oct. 29, 1954, in "Review of U.S. Basic National Security Policy, NSC 162–5422" folder, PPS1954 files.

<sup>42</sup> *FRUS*, 1952–1954, 2: 1585–89; Memorandum from Murphy to the Secretary on "Review of United States Policy on Control of Armaments," Dec. 29, 1954, in "Atomic Energy-Armaments 1954" folder, PPS1954 files.

<sup>43</sup> *FRUS*, 1952–1954, 2: 1563–66, 1580–82.

<sup>44</sup> *FRUS*, 1955–1957, 20: 28–34, 144–55.

<sup>45</sup> Matthew Evangelista, "Cooperation Theory and Disarmament Negotiations in the 1950s," *World Politics* 42, no.4 (July 1990): 502–28.

<sup>46</sup> *FRUS*, 1952–1954, 2: 231–34, 403, 420, 1083–85; Report of Lincoln Laboratory on "Basic Philosophy of a Sound Defense," Dec. 19, 1952, in *Digital National Security Archives* (hereafter *DNSA*).

<sup>47</sup> *FRUS*, 1952–1954, 2: 583, 591.

<sup>48</sup> *FRUS*, 1952–1954, 2: 464–75.

<sup>49</sup> *FRUS*, 1952–1954, 2: 477–489; Memorandum titled "Views of the NSC Consultants on Continental Defense," Sept. 24, 1953, in "Continental Defense 1953(5)" folder, Disaster files, DDEL.

<sup>50</sup> NSC 5408, "Continental Defense," Feb. 11, 1954, in *DNSA*.

<sup>51</sup> Memorandum from James S. Lay to the Secretary of Defense, "Review of Basic National Security Policy," Dec. 14, 1954, in "Military Program (4)" folder, Disaster files, DDEL.

<sup>52</sup> Memorandum titled "Study on Surprise Attack," Aug. 25, 1954, in "S/P Papers May-July" folder, PPS1954 files.

<sup>53</sup> Report by the Technological Capabilities Panel of the Science Advisory Committee, "Meeting the Threat of Surprise Attack," Feb. 14, 1955 (hereafter TCP report), in *DDRS*, CK3100152581 and CK3100144896, declassified Oct. 29, 1997: 14–16, 57–70.

<sup>54</sup> TCP report, 17–22, 73–76. See also *FRUS*, 1955–1957, 19: 41–56.

<sup>55</sup> *FRUS*, 1955–1957, 19: 95–108, 145–50.

<sup>56</sup> *FRUS*, 1955–1957, 19: 111–22, 166–70.

<sup>57</sup> *FRUS*, 1955–1957, 19: 101–02, 168–69.

<sup>58</sup> *FRUS*, 1955–1957, 19: 87–94.

<sup>59</sup> *FRUS*, 1955–1957, 19: 187–88.

<sup>60</sup> By arguing that every war with the USSR would escalate to an all-out nuclear war, Eisenhower was attempting to silence the growing contention that the United States should be prepared for nonnuclear limited wars as MAP might well prohibit it from resorting to massive nuclear retaliation against Communist aggression on areas of peripheral interest. Craig, *Destroying the Village*, chap. 4; Gaddis, *We Now Know*, 230–34.

<sup>61</sup> *FRUS*, 1955–1957, 19: 188–91.

<sup>62</sup> NSC 5606, "Continental Defense," June 5, 1956, in *DNSA*.

<sup>63</sup> *FRUS*, 1955–1957, 19: 321–33, 347–52.

<sup>64</sup> Memorandum from David Z. Beckler to Arthur S. Flemming, "Possible Area of Inquiry by the Science Advisory Committee," Oct. 9, 1956, in "Science Advisory Committee (3)" folder, Subject Subseries, White House Office, Office of the Special Assistant for National

Security Affairs, DDEL; Memorandum from I. I. Rabi to Arthur S. Flemming, Dec. 19, 1956, in the same folder; Memorandum, untitled, Mar. 12, 1957, in the same folder.

<sup>65</sup> *FRUS*, 1955–1957, 19: 379–81.

<sup>66</sup> See note 60 above.

<sup>67</sup> *FRUS*, 1955–1957, 19: 482–83. Memorandum from Arthur Radford to the Secretary of Defense, “Continental Defense (NSC 5606),” June 12, 1956, in “Net Evaluation Subcommittee (5)” folder, Disaster files, DDEL.

<sup>68</sup> NSC 5709 “A Federal Shelter Program for Civil Defense,” Mar. 29, 1957, in *DNSA*; *FRUS*, 1955–1957, 19: 459–64.

<sup>69</sup> *FRUS*, 1955–1957, 19: 638–61; David L. Snead, *The Gaither Committee, Eisenhower, and the Cold War* (Columbus: Ohio State UP, 1999), chaps. 2 and 4.

<sup>70</sup> *FRUS*, 1955–1957, 19: 620–24.

<sup>71</sup> *FRUS*, 1958–1960, 3: 10–25; NSC 5807/1, “Measures to Carry out the Concept of Shelters,” Apr. 2, 1958, in *DNSA*; Thomas J. Kerr, *Civil Defense in the U.S.: Bantaid for a Holocaust?* (Boulder, CO: Westview Press, 1983), 59–116.

<sup>72</sup> NSC 5802/1, “U.S. Policy on Continental Defense,” February 19, 1958, in *DNSA*; *FRUS*, 1958–1960, 3: 32–40.

<sup>73</sup> NSC 6013, “Status of United States Military Programs as of 30 June 1960,” Dec. 10, 1960, in *DNSA*.

<sup>74</sup> Benjamin P. Greene, *Eisenhower, Science Advice, and the Nuclear Test-Ban Debate, 1945–1963* (Stanford, CA: Stanford UP, 2007), chaps. 7–9.

<sup>75</sup> Bundy, *Danger and Survival*, 287–95; Wenger, *Living with Peril*, 87–99.

<sup>76</sup> *FRUS*, 1955–1957, 19: 99. See also *FRUS*, 1955–1957, 19: 568; *FRUS*, 1958–1960, 3: 519, 523.

<sup>77</sup> Memorandum from Val Peterson to James S. Lay, Jr., “Progress Report on Continental Defense (NSC 5408),” May 20, 1955, in “Continental Defense 1955–1956 (1)” folder, Disaster files, DDEL; Guy Oakes, *The Imaginary War: Civil Defense and American Cold War Culture* (New York: Oxford UP, 1994); Ira Chernus, “Operation Candor: Fear, Faith, and Flexibility,” *Diplomatic History* 29, no. 5 (Nov. 2005): 779–809.

<sup>78</sup> Spencer R. Weart, *Nuclear Fear: A History of Images* (Cambridge: Harvard UP, 1988), chap. 13.