In 1953 a Hollywood-based U.S. Air Force film studio, Lookout Mountain Laboratory, produced a documentary film about America’s first detonation of a thermonuclear device, the 1952 “MIKE” device. The film, called Operation Ivy, was initially shown only to the highest-level government officials, but a later, edited version was eventually released for public distribution. We argue that the story of Operation Ivy illuminates not only the ways in which the rhetoric of the “Super” was managed but also the way in which the Cold War state was both subject to and productive of political and aesthetic sensibilities.

Nuclear history implicates a history of vision. Atomic science began in a struggle to see the invisible workings of the atom and reached a climax in the struggle to see reason, order, and humanity in the awful power of nuclear weapons. Therefore, a history of technologies of
vision accompanies the history of nuclear technologies: diagrams, schematic charts, blueprints, illustrations, maps, animations, indicator lights, gauges, computer screens, and an array of cameras. Indeed, everywhere there were cameras: still and motion, standard and high-speed, ground and aerial, color and black-and-white.

Cameras were vital organs of nuclear vision because they could be rigged to record otherwise indiscernible visual facets of nuclear ballistics, phenomena scientists could not directly observe and computers failed to model. But photographic pictures, especially motion pictures, were vital too because they brought ready-at-hand rhetorics: rhetorics of editing, mise-en-scène, and narrative were crucial to constructing the story of American nuclear power for those within and without the nuclear weapons complex. Cameras were therefore not only machines by which to see but also machines that produced artifacts that could be seen; and these artifacts, through rhetorical negotiations, could become means of establishing a common collective vision. Consequently, from the beginning of atomic tests at the Trinity test site, cameras and their operators accompanied scientists and soldiers to every corner of the planet where America’s new weapons were tested or deployed, and the resulting film artifacts were carefully dispersed through the scientific, military, governmental, and sometimes public channels of the nation and the world.

This essay follows the rhetorical life of one such film, a 1953 documentary called *Operation Ivy*. *Operation Ivy* was produced by a secret air force film studio located in the hills of Hollywood called the 1352nd Photographic Squadron of the United States Air Force—also known as Lookout Mountain Laboratory (LML). During its two-decade history (1947–69), LML scripted, shot, developed, catalogued, stored, and distributed not only *Operation Ivy* but hundreds of thousands of feet of film footage and millions of photographs. The studio, staffed by a cadre of Hollywood personnel, accompanied agencies of the U.S. government to different parts of the globe, from Vietnam to Antarctica to Panama, to document America’s Cold War activities. LML’s most significant work concerned America’s nuclear weapons program. During the era of atmospheric nuclear tests, 1945–63, LML was the chief agency charged with film documentation of the tests. Their typical documentary products were narrative films, complete with scripts, soundtracks, special effects, and sometimes the use of professional Hollywood actors.
Of the many films LML produced, *Operation Ivy* is arguably the most important: its subject was the first-ever detonation of a thermonuclear device—the so-called “MIKE” device—carried out by the United States on November 1, 1952 at Eniwetok Atoll in the Marshall Islands of the South Pacific (the area the United Nations had entrusted to the United States as the Trust Territories of the Pacific Islands in 1947). However, though the MIKE device carried 800 times the explosive power of the Hiroshima bomb, it was not a workable bomb, not at all. It was rather, as one engineer put it, “a massive cryogenic factory.” In fact, it was so big—weighing between 50 and 65 tons—it had to be detonated from within a large warehouse-like structure built upon the tiny island of Elugelab. Such an unwieldy contraption could never be dropped from a bomber, let alone made to ride on a missile. Indeed, though MIKE is frequently said to have inaugurated the age of thermonuclear weapons, it was not the device itself but its fantastic image that did the inaugurating. That image was mechanically constructed in the cameras of LML.

The image genesis of the thermonuclear age is significant for several interrelated reasons. First, the “Super,” the “fantastic weapon,” the “ultimate weapon,” or the “wonder weapon”—as the thermonuclear device was variously called when it was functionally only a giant gadget but rhetorically a powerful image—would function as a final rather than efficient cause in the American Cold War state. A dark idealism came to displace the realisms of the 1940s: the Super was the image toward which the state would move with all of the inexorable force of “history,” rather than that reality from which it would move. Second, the image genesis of the thermonuclear bomb meant that the Super—as an image and an idea—would be used against the very citizens it was meant to protect, both in the United States and abroad. Citizens would be subjected to a fear they could not dismiss and to a future they did not want. Citizens would therefore become the objects of state “management.” Third, the “fantastic weapon” would also be used as a Cold War weapon within the political battles of the American state—for, to be sure, the American Cold War state was at war with itself, contesting not only different conceptions of “America” in the world of nations but the very meaning and significance of its liberal democratic traditions in light of this new and immensely destructive power. Finally, the appearance of the Super would present a crisis to the state, a legitimation crisis. Not only did America’s nuclear activities leave American citizens in a state of uncertainty
with respect to the government’s designs, the United States would be accused by the Soviets—who despite their own nuclear program were publicly calling in 1952 for the abolition of nuclear weapons—of “warmongering” and of unnecessarily accelerating the nuclear arms race to catastrophic dimensions. Indeed, America’s European allies were quite anxious about the nuclear arms race and wondered aloud before American diplomats whether U.S. nuclear actions were making Europe less rather than more secure.

In sum, the appearance of the Super initiated upheavals in what we refer to in this essay as the sensibility of the state: the ability of the state to sense, to be sensed, and to establish a common sense. Indeed, as the Super was an image before it was a workable bomb, the first field of battle was sensibility—a capacity culturally achieved more than politically organized. Faced with crises of history, governance, and legitimacy, the American Cold War state sought to render itself, its world, and its activities “sensible” before the immediate prospects of a thermonuclear age. And it used media of the senses—sound, word, and image—to do so. The Super reconfigured the intensional logics of the American Cold War state, moving America inexorably toward an awful destiny, setting the state against the citizenry, and initiating legitimation crises both within and before the state. It thus brought about a new “distribution of the sensible,” to use Jacques Rancière’s phrase, a reconfiguration of the “self-evident facts of sense perception” and a redistribution “of spaces, times, and forms of activity.”

The dawn of the thermonuclear age meant profound changes in the way the American state and its citizens saw itself, its territories, its temporalities, and its activities.

This essay follows the rhetorical life of LML’s *Operation Ivy* to trace the formation and contestation of the sensibility of the thermonuclear American state. *Operation Ivy* and companion still photos produced by LML were the means by which the Super was materialized and circulated as an image. For, at least until the next thermonuclear test, no other images of thermonuclear destruction existed (other than those lodged in memory and imagination). Film was the means by which the state quite literally absorbed thermonuclear light and reproduced it as an aesthetic and rhetorical object. *Operation Ivy* was therefore treated as a state treasure, a treasure of meaning. Its production was kept a closely guarded state secret, and its circulation tightly controlled. This control, however, was incomplete and imperfect. For *Operation Ivy* was constructed and circulated as an object of meaning,
and meaning eludes control, not the least the control of political regimes. In fact, *Operation Ivy* would instead expose the contested sensibilities of the Cold War state together with what Guy Oakes refers to as the “antinomies” of American Cold War culture.10

Our discussion of *Operation Ivy* proceeds in five parts. First, we will offer an overview of the various attempts by the Truman and Eisenhower administrations in the late 1940s and early 1950s to control the meaning of the as-yet-unrealized thermonuclear bomb through various directives, policies, and practices. Then we will present the central conceptual contribution of this essay, the notion of “the sensibility of the state,” especially as it relates to film technology. Next, we will overview the activities of LML in the early Cold War to establish the institutional context for the production of *Operation Ivy* before, in the subsequent section, discussing the production of *Operation Ivy* itself, from its inception to its completion in a 63-minute top-secret film. Finally, before concluding, we will discuss the eventful circulation of *Operation Ivy*, first in government circles and then in public ones. As this overview suggests, the bulk of this essay is historiographical in nature and is built off extensive archival research. But our intention is to contribute to a broader discussion of political rhetoric in terms of political aesthetics. Extending Rancière, we show in the historiographical discussion how the state is both subject to and productive of sensibilities.

**HOW (NOT) TO MAKE SENSE OF FANTASTIC WEAPONS**

Apparently, the first atomic bombs were destined to kill, so much so that in 1945, when the U.S. Army could well have dropped these kiloton bombs somewhere off the shores of Japan to display their newly discovered military might, they instead dropped them on Japanese cities full of civilians, killing over 200,000 and maiming, contaminating, burning, and forever traumatizing many thousands more.11 Reactions were strong, and it did not take long for some—even some in the highest ranks of the U.S. military—to question whether atomic bombs should ever be used to kill again.12 Virtually everyone agreed that the atomic bomb was an epochal weapon. It meant a new age. “Yesterday,” as Hanson W. Baldwin wrote in the *New York Times* the day after Hiroshima, “man unleashed the atom to destroy man, and another chapter in human history opened, a chapter in which the weird, the
strange, the horrible becomes the trite and the obvious. Yesterday we clinched victory in the Pacific, but we sowed the whirlwind.”

What sense was there then in further experimentation to create even more horrible atomic bombs? The Truman administration was repeatedly confronted with the question in its passage to the first thermonuclear test, the November 1952 MIKE detonation. In addition to a vigorous moral opposition from the scientific sector, represented by the likes of Eugene Rabinowitch of the Bulletin of Atomic Scientists and Robert Oppenheimer of the Institute for Advanced Study and Truman’s own ad hoc adviser, there were a host of technical and practical questions as yet unanswered—not the least how to make a thermonuclear device deliverable. Consequently, the Super was met with a mixture of superlatives and skepticism. The influential columnist Joseph Alsop echoed the latter sentiments in a September 1951 Washington Post column:

The soothing “wonder weapon” story is getting under way again. President Truman has given it a boost. Senator Brien McMahon has given it a good hard shove. The Air Force has published a series of publicity photographs, lacking nothing but glorious technicolor, of its new “Matador” guided missile. And now we have the President’s request for a supplemental appropriation of more than 400 million dollars for the South Carolina hydrogen bomb plant.

“Maybe there really are wonder weapons,” Alsop continued sardonically. “But it is well to remember that the reports about these weapons are generally phony....[I]t is very far from sure, as yet, that this [hydrogen] weapon from which so much is hoped and feared is going to turn out to be a practical question.” On the other hand, the Truman administration saw in stories and images about “wonder weapons” what Edward Barrett, assistant secretary of state for public affairs, in 1951 described in a memo to the White House as “enormous psychological possibilities”—at home, with allies, and against the Soviet Union. Indeed, the atomic bomb was seen even in 1945 as a “psychological” weapon as much as a physically destructive one, and the decision to drop the bombs on Hiroshima and Nagasaki was strongly informed by “psychological” factors.

But these psychological possibilities were far from stable. Rather they could vacillate wildly between creating confidence in the American people (by creating fear in America’s enemies) and causing panic and anxiety. In
the summer of 1950, the Department of Defense’s (DOD) Ad Hoc Committee on Chemical, Biological, and Radiological Warfare—established in 1949 by Secretary of Defense Louis Johnson—urged DOD to take the lead in coordinating public information on “weapons of mass destruction” (a term that the report urged publicists not to use). It sought an “organic” public information campaign, one that did not appear forced, coordinated with the Department of State and aimed at offering “information” free of both “emotion” and “moral implications.” The goal was “making the public aware in a nonhysterical sense” through a “factual and objective viewpoint,” thus to avoid “panic,” “speculation,” and “exaggerated fear.” Such an “educational” program, the Ad Hoc Committee reported, could prepare Americans to withstand with relative calm chemical, biological, or atomic attacks on their cities and encourage them to support DOD’s ongoing chemical, biological, and atomic weapons programs. The Ad Hoc Committee therefore recommended that the government carefully measure the “impression,” “tone,” “indications,” and “terms” used in directly or indirectly (through leaks) managing publicity about “wonder weapons.”

On December 5, 1950, Truman issued a directive instructing government agencies to “take immediate steps to reduce the number of public speeches pertaining to foreign or military policy” and to set up channels of official clearance. “The purpose of this memorandum is not to curtail the flow of information to the American people,” Truman wrote to government employees, “but rather to insure that the information made public is accurate and fully in accord with the policies of the United States.” However, as Truman’s Psychological Strategy Board (PSB) confirmed in National Security Council (NSC) 126, “Public Statements with Respect to Certain American Weapons,” released in late winter 1952, emphasis on the accuracy or consistency of information was about creating rhetorical effects conducive to what Truman and his advisors deemed national security interests. All public information, NSC 126 instructed, had to be carefully crafted to consider impacts according to three criteria:

1. Will this information strengthen the morale of the free world?
2. Will this statement at this time help the American public to understand and accurately appraise the capabilities of these weapons?
3. Will this statement create the fear that the U.S. may act recklessly in the use of these weapons?
On the one hand, the Truman administration worried that poorly conceived statements could generate alarm; on the other hand, they imagined “ill-considered statements about these weapons may create a false sense of security, lead to expectations of miracles in war and possibly jeopardize the maintenance of a balanced defense program, both military and civil.” The objective was to offer just enough information to spur citizens into alertness and support for defense programs without sending them into hysteria. Under NSC 126, members of the Truman administration were to structure their statements according to the exigencies of such rhetorical aims.

Upon taking office, Eisenhower began to streamline the process. Initially, the Eisenhower administration tiptoed toward a policy of “candor.” Candor was a central policy proposal of the so-called “Oppenheimer Report,” a product of a Truman-era study commission on disarmament led by Robert Oppenheimer. The Oppenheimer Report painted a stark picture of the present and future of the nuclear arms race, declaring that it was proceeding at “an ever more rapid pace” and that efforts to limit its speed seemed “hardly thinkable.” The report advised instead a policy of “candor” that would frankly acknowledge the scope and speed of the arms race. In a kind of hermeneutic turn, Americans and the world, it argued, needed to come to terms with the “meaning of armaments.” “The destructive power of the atomic stockpiles is of a wholly new order,” it insisted. Candor with the world about this fact was badly needed. More than building more weapons and strengthening defenses, the U.S. government needed “a focusing of responsibility . . . for both thought and action.” America’s allies needed “a new level of understanding . . . on the meaning of atomic armaments.” Thus the Oppenheimer Report, initially commissioned to appraise disarmament possibilities, turned into a policy paper on the importance of coming to terms with the meaning of nuclear weapons.

“Candor” initially appealed to Eisenhower. He, too, saw nuclear weapons as of a wholly new order and suspected that American and global publics needed to come to terms with the nuclear age. But candor, the president and his advisors began to worry, could lead to panic. And so, rather than a policy of “candor” they began to pursue an overt campaign against panic. In August of 1953, Val Peterson, head of U.S. Civil Defense, published a widely circulated article in *Collier’s Weekly*, “Panic: The Ultimate Weapon.” “Ninety per cent of all emergency measures after an atomic blast,” he wrote, “will depend on the prevention of panic among survivors in
the first 90 seconds.”26 Holding up the snowy owl as “the most panic-proof animal in creation,” Peterson continued, “Curiously, tests have shown that the closest human counterpart to the unpanicky owl is the cowboy of the Western high plateaus, where the vast lonely spaces seem to weave into men an attitude of stoic calmness.”27 On the other hand, “Less intelligent people are much more panic-prone.”28 Thus Peterson correlated public information with stoic calmness. “Emotion management” would mean controlling both the meaning and the feeling of nuclear weapons.

Indeed, as Martin Medhurst and Ira Chernus have each discussed, “candor” eventually led not to a policy of frank disclosure but rather to a carefully crafted propaganda campaign built off Eisenhower’s Atoms for Peace speech, delivered before the United Nations on December 8, 1953.29 Eisenhower and his Operations Coordinating Board (OCB) landed on the position that Americans and the world at large needed to be convinced that the atom, the symbol of such horrible destruction, could become an agent of peace and prosperity by means of nuclear energy and other “peaceful” nuclear technologies. It could be, in a word, economized, made an agent of economic prosperity rather than national destruction.

The turn toward “Atoms for Peace” came as Eisenhower centralized and militarized propaganda and “public information” operations, creating, in Shawn Parry-Giles’s words, “a propaganda pyramid of operations [that] allowed Eisenhower to serve as commander-in-chief of the propaganda program, with the White House functioning as the central command post.”30 Central to this effort was the formation of the OCB, first led by Time Life executive and World War II psychological warfare expert C. D. Jackson. The OCB replaced Truman’s PSB but continued its work. The key difference was a greater degree of coordination, centralization, and control.31 The OCB worked closely with the Central Intelligence Agency (CIA) to monitor “world opinion,” even as it drew upon the professional practices learned in Jackson’s Time Life and World War II experiences to coordinate campaigns that would support American interests without appearing to be “propaganda.”

With respect to publicity about nuclear weapons, Eisenhower leaned heavily on the OCB and the Atomic Energy Commission (AEC) to make judgments about the nature, timing, and suitability of public statements. Unlike Truman, who had put the DOD and Department of State in the lead, Eisenhower’s NSC decided in the first year of the administration that all
public statements regarding nuclear weapons had to be cleared through the AEC, in consultation with the OCB and CIA—stripping the Departments of Defense and State of authority to speak about nuclear weapons without AEC clearance. The aim was to locate authority for public information on weapons of mass destruction in the White House, and the effect was chilling. The director of Eisenhower’s Foreign Operations Administration, for example, told his staff to limit any statements about nuclear weapons to “quotation of a pervious statement made by the President of the United States or by the Chairman of the Atomic Energy Commission.”

The key word in Eisenhower’s efforts was control: even as the arms race seemed to be escalating to a point out of control, the Eisenhower administration was determined to keep the story of America’s nuclear ambitions under control. But administration officials could not help but acknowledge that control was hard to keep. Indeed, the massive propaganda efforts made under the Atoms for Peace program were unprecedented in scope and style, constituting, in the words of Kenneth Osgood, “quite possibly the largest single propaganda campaign ever conducted by the American government.” Yet, it was not just the scale and scope of the Atoms for Peace campaign that distinguished it, it was its sophistication. Atoms for Peace was aimed at attitudes more than opinions and sought to orient more than persuade the world toward the virtues of the “peaceful atom,” and more importantly, America. In its many exhibitions, publications, educational initiatives, speeches, and films Atoms for Peace operated according to the principles of identification more than persuasion.

Yet, we cannot attribute this approach, as scholars have tended to do, to the genius of Eisenhower’s team alone. Indeed, just as the campaign against panic had begun in the Truman administration, so the turn to the “peaceful” uses of the atom had been anticipated there. Truman had left for Eisenhower the “Possony Report,” named after its author Stephen Possony, which had argued that America should counter Soviet exploitation of the American weapons program as evidence of “the ‘barbarous’ character of American ‘imperialism’” by pushing the “atom as a peace and prosperity maker” rather than “a war maker.” America’s aim, the Possony Report advised, should be to reorient the world toward the atom as an instrument of peace by foregrounding nuclear energy over nuclear weaponry. At the same time, Truman left for Eisenhower two unsettling precedents: first, his decision to pursue the thermonuclear bomb against the objections of some
his most prominent advisors, and second, his decision to prohibit any public admission of the particulars of America’s thermonuclear developments. Under Truman, in fact, the AEC began to take more and more control over public information about America’s nuclear pursuits. Indeed, in September 1952 the AEC concluded, with Truman’s concurrence, that all decisions about public information regarding America’s thermonuclear pursuits would have to be made through the AEC. As we will see, the AEC maintained a lock on such information: official acknowledgment of the U.S. thermonuclear program would have to wait till the spring of 1954, over a year after Truman left office and some 18 months after the MIKE test.

In sum, then, the Truman–Eisenhower approach to nuclear weapons pointed to a larger political regime, one that transcended presidential personalities and policies and encompassed what Garry Wills calls “bomb power,” the remaking of the American presidency and state around nuclear weaponry. Michael J. Hogan has referred to this larger political regime as the “national security state.” Hogan stresses that the national security state entailed, by its very existence, a rebuke of traditional American isolationism and hemispheric regionalism, assuming new institutional logics that presumed America’s global power and responsibility. Its existence touched upon such vital issues as economic livelihood, military authority, presidential prerogative, technological futures, secrecy, and other burdens of American empire. Many of America’s political debates in turn addressed its exigencies, and the biggest legislative and policy efforts of the latter half the 1940s were devoted to sorting out its structure: the Atomic Energy Act (1946), the National Security Act (1947), the Truman Doctrine (1947), and the Marshall Plan (1948). But the national security state was more than an institution or set of institutions; it was an ideology, a mindset, a set of guiding assumptions that represented “the country as a great power with an expansive military machine and global responsibilities” and more ominously assumed the vulnerability of the United States to outside attack for the foreseeable future. It entailed a new way of seeing the state as a bulwark against geopolitical isolation, even extermination. This, in turn, meant new ways of what James C. Scott refers to as “seeing like a state”: new ways of counting, accounting, plotting, mapping, managing, and controlling. Most broadly, therefore, the national security state entailed a revolution in political aesthetics: for, as Robert Oppenheimer had recognized, the central crisis before the nuclearized state was one of meaning and, with it, feeling.
The national security state sought to make sense of the insensible by constructing a sensibility.

THE SENSIBILITY OF THE STATE

“Political aesthetics” has recently been resurrected from Walter Benjamin’s deathly association of the “aestheticization of politics” with Fascism. Critics from an array of fields—art history, visual studies, memory studies, political theory, media studies, and rhetorical studies—are recognizing anew that political orders implicate aesthetic orders, or that, in the words of Robert Hariman, “our political experience is styled.” But in its resurrection, political aesthetics has reappeared in new bodies. No longer tightly bound to the art object, political aesthetics has been moving into the sensorium, raising critical questions about what Fred Turner has recently called the “surround,” the multimedia environments in which we live, move, and have our political being.

Perhaps the most influential formulation in this new turn toward political aesthetics is Rancière’s notion of the “the distribution of the sensible.” Rancière writes:

I call the distribution of the sensible the system of self-evident facts of sense perception that simultaneously discloses the existence of something in common and the delimitations that define the respective parts and positions within it. A distribution of the sensible therefore establishes at one and the same time something common that is shared and exclusive parts. This apportionment of parts and positions is based on a distribution of spaces, times, and forms of activity that determines the very manner in which something in common lends itself to participation and in what way various individuals have a part in this distribution.

Rancière’s distribution of the sensible posits that a basic—we might even say “primal”—aspect of political order is found in the sensorium, understood in the broadest sense. Indeed, Rancière’s distribution of the sensible recalls Aristotle’s phantasia. As one of us (O’Gorman) has argued elsewhere, phantasia was central to Aristotle’s notion of rhetoric, especially to rhetorical, and thus political, judgment: “Judgment (krisis), whether private and mental or public and deliberative, entails deliberation about appearances, and more
basically, psychic and epistemic processes that depend on *phantasia*.\textsuperscript{46} Aristotle’s *phantasia* has subjective, objective, and temporal modalities: far from being the exclusive possession of a self, it is an attribute of self, world, and time. Thus, with Rancière, we may speak of its “distribution.”

*Phantasia*, like political aesthetics, is more than a matter of vision alone. Though it is channeled primarily through vision, it stretches across the whole sensorium, constituting not only a distribution of the sensible but a distribution of the senses. Perhaps the best word in English to capture these distributions, therefore, is *sensibility*. Sensibility is a term with an impressive set of meanings: an ability to sense; an ability to be sensed; and, stretching the term into its variants, a means by which to denote the “common sense” or “sensible” character of some thing or event, as well as a synonym for something like “taste” in the old eighteenth-century sense, or “style” in a robust sense like that offered by Hariman.\textsuperscript{47} As C. S. Lewis writes in his *Studies in Words*, the word “sense” encompasses both “ordinary intelligence or ‘gumption,’” in keeping with the notion of “common sense,” and “perception by sight, hearing, taste, smell or touch,” the latter in keeping with the Greek word from which “aesthetics” is derived, *aesthesis*.\textsuperscript{48} To claim that political orders are, among other things, aesthetic orders is to claim that political orders *sense*, are *sensed*, and establish a *common sense* understood not only in the basic sense of the “reasonable” but more broadly as a “cultural system” (Geertz) and a “structure of feeling” (Williams).\textsuperscript{49}

Politics is a manifold activity, and political aesthetics is far more than the aesthetics of the state. Rancière thus approaches political aesthetics in terms of political regimes that transcend particular states and their leaders. Nevertheless, the state—understood as a set of interlocking governing institutions—remains an important site of political aesthetics with respect to production, contestation, reproduction, and reception. Indeed, states have actively sought to construct sensibilities: to sense, to be sensed, and to construct a common sense. For example, as James C. Scott has shown, modern states have attempted to render the world “legible” by, among other things, mapping, classifying, and abstractly organizing the lifeworld into a system.\textsuperscript{50} But states also attempt to render themselves “legible” to the lifeworld, particularly in the form of legitimacy claims. Here the state must render itself, in part at least, as a text open to interpretation.\textsuperscript{51} Indeed, legibility and legitimacy constitute two complementary poles of modern statehood and both rest on sensibility: the former entails a capacity to sense
and the latter to be sensed. Moreover, both work together to establish a “common sense,” both in the epistemic sense of the reasonable and in the aesthetic sense of conforming to a common style and “structure of feeling.”

But in so considering the sensibility of the state we need to add another consideration, technology. Technologies, especially technologies of communication, have aesthetic aspects and implications—some would say profoundly so. James Carey, remarking on the work of Marshall McLuhan, writes, “The media of communication affect society principally by changing the dominant structures of taste and feeling, by altering the desired forms of experience.”

Both “legibility” in Scott’s sense and claims of legitimacy more broadly appeal to the paradigm of writing: legibility in obvious ways, and legitimacy in more subtle “hermeneutic” ways. Literacy and interpretation are indeed pivotal in the construction of modern statehood: the imposition of order by mapping, classifying, and abstractly organizing the lifeworld into a system is a basic state function, as is the attempt of the state to render itself hermeneutically meaningful in the context of the “nation.”

But as Paul Virilio and Friedrich Kittler have shown, the modern state has also made heavy use of the optical media, particularly in its war-making activities. Optical media have had more than instrumental significance for the state; they have contributed, with writing, to the constitution of state power. But even here we have perhaps underestimated the role of one of the most crucial developments in optical media, film. Film may be no more than an elaborate writing technology (though Kittler and others would differ), but exposed film, unlike most forms of writing, has been acted upon by the world and indexes that act. Ariella Azoulay writes, “Writing in light is what transpires when the camera shutter opens and light rays, reflected off that which stands in front of the camera, penetrate the lens and are inscribed upon a certain surface.” Who or what does this writing? Light. “Nature,” Azoulay concludes, “now inscribes itself by itself,” and this makes photography an altogether peculiar sort of writing.

Film—especially when coupled with recorded or manufactured sound—approaches a direct relationship to the world more aggressively than writing, charting, accountancy, and so on. Film’s apparent capacity to directly absorb the lifeworld grants it a seemingly immediate connection to flesh, action, surroundings, and life, an immediacy that eludes traditional writing. And in the reanimation of motion-picture projection, film offers something more than the schema of legibility; it offers story and spectacle. Hence film
offers the state the tantalizing possibility of something beyond the epistemic authority of legibility: the vitality of meaning.

That the twentieth-century state made heavy use of cameras in its operations, ranging from police photo books to surveillance footage to propaganda films, suggests that the camera held out before the modern state a range of possibilities. Film, that is, should not be understood only as a potential organ of state power for surveillance or propagandistic control, though it is that. It also has been a means by which states in crisis have approached and sought to secure meaning. Most broadly, film and cameras more generally have addressed the (late-)modern state’s manifold attempts at sensibility: its efforts at perception, an ability to sense; an attempt at materialization, an ability to be sensed; and its work to form and conform to a “common sense.”

Indeed, in World War II the camera moved into the heart of the sensibility of the U.S. warfare state. The entrance of the camera was a factor of both analytics and appetite. Photographers and cameras were conscripted by the War Department in large numbers to document combat operations and their effects. Film provided defense analysts with target, damage data, and other measures of American operational efficiencies. But far more than documentation and data, the U.S. government also saw in the camera, as Thomas Doherty has argued, a vital inroad into “cultural meaning,” specifically in the form of Hollywood motion pictures. Amid the emergency conditions of World War II, Washington and Hollywood formed an “unprecedented alliance” that “generated not only new kinds of movies but a new attitude toward them.”

Films, all sorts of films—educational, documentary, comedies, musicals, melodramas, newsreels, and film reports—were spun out of Hollywood and its affiliates on behalf of the war effort with breathtaking rapidity, with both Hollywood and the government rich beneficiaries of these war efforts.

It is therefore not surprising that the camera became a regular state organ after the war. In the early days of the Cold War, the Department of State, the AEC, and the various branches of the U.S. military integrated film production units into their day-to-day organizational and operational structures. Images of the effects of atomic weapons and devices were more than emblematic here; they were “representative,” in a political sense, standing in for the state and its ambitions, performing them, realizing them. In America’s experiments with atomic power, film absorbed light so that the state
could construct its own sensibility. In film and through the camera the United States came to see, to see itself, and to be seen.

**LOOKOUT MOUNTAIN LABORATORY, THE BOMB, AND THE SENSIBILITY OF THE STATE**

And so we come to the home of LML, headquartered at 8935 Wonderland Avenue, high upon a Hollywood hill in Laurel Canyon. LML was the U.S. government’s largest film production unit during the height of the Cold War and, more than any of the number of other Cold War government film units, drew upon the expertise of Hollywood as a means of constructing the sensibility of the state. LML’s sprawling 15,000-square-foot facility was built off the skeleton of a World War II radar station (fig. 1). The facility included a sound stage, a couple of screening rooms, a processing facility, an editorial department, giant film vaults, and an animation room perched on top of the building like a lookout tower to draw in natural light. In the complex, well over a hundred personnel shot, developed, catalogued, stored, and distrib-
uted hundreds of thousands of feet of film footage and photographs and produced, scripted, and edited hundreds of scientific, technical, and training films, together with “informational” motion pictures. The studio employed full time a wealth of Hollywood experts and worked with on an ad hoc basis such Hollywood notables as Jimmy Stewart, Walt Disney, Marilyn Monroe, and John Ford. Over its two-decade history, clients would include not only the country’s own air force but other branches of the DOD and the AEC, Civil Defense Agency, and even private government contractors.

LML was not merely a government version of an industrial film studio like those at General Electric or General Motors. Rather, as its name suggested, it was a government laboratory, the site of ambitious experiments in film and other technologies of visual representation. It did early work with Cinemascope, Vista Vision, 3-D photography, new forms of high-speed photography, and stereophonic sound. LML worked with 16 mm, 35 mm, and even 70 mm film; it produced volumes upon volumes of still photographs; it had an active animation department, staffed by Disney veterans, among others; and worked with various sorts of special effects, including optical printing work. Moreover, Lookout Mountain would serve as a secretive site for numerous meetings among nuclear-related military, political, scientific, and technical personnel attempting to steer a course for nuclear weapons development.

LML films drew on the conventions of Hollywood to create “objective” filmic accounts of the activities of the military industrial complex. That Hollywood could be seen as a means toward aesthetics and rhetorics of objectivity was consistent with the narrative emphasis of “classical Hollywood cinema.” Above all, characters rather than cameras functioned as narrative anchors. Indeed, LML was born out of the efforts of the air force’s “Hap” Arnold to draw from Hollywood a distinct air force identity, an identity that would win the air force independence from the army after the war. During World War II, Arnold oversaw the creation of the First Motion Picture Unit, a group responsible for over 300 propaganda and training films and for employing such Hollywood luminaries as Clark Gable, William Holden, and Ronald Reagan. As Douglas Cunningham has argued, the significance of the First Motion Picture Unit went well beyond the war effort; “its establishment set a precedent for a new type of cooperation between Hollywood and the U.S. government.”
established in 1947 by a newly independent air force, its task was to further this cooperation.

If film helped construct for the air force a distinct identity, atomic weapons gave them a clear and compelling strategic mission. After the war, the air force entered into a sustained and virulent battle with the navy and, to a degree, the army over possession of America’s atomic forces. Arnold and others within the air force saw in the Bomb the ultimate justification for air force independence. Indeed, the First Motion Picture Unit’s most significant film, *The Last Bomb*, offered Americans the first official story of the atomic destruction of Hiroshima and Nagasaki as a story of the significance of air power in modern war. Narrated by Reed Hadley (an actor we will meet again in *Operation Ivy*) and featuring Curtis Lemay, *The Last Bomb* culminated in an image of a mushroom cloud and explained how the Bomb had saved thousands of American lives. Thus the Bomb gave the air force a new object even as it gave the camera a new subject, and it forged a new relationship between cinema and weapons. In the next decade, LML, together with its partner, the private firm EG&G, would end up at the heart of this relationship.

In fact LML would be a node in the global network of agencies and activities organized around the development and production of nuclear weapons during the height of the Cold War. It provided the state the means through which the significance of the Bomb could be articulated, negotiated, and translated. LML actively participated within the translations of the language and routines of state science into new strategic, political, and national goals. It was the studio’s job to make sense of nuclear tests, as well as to introduce and cultivate new kinds of political sensibility that would position the Bomb somewhere between the ultimate weapon and a manageable product of state power. And these capacities rested on the more basic capacity of its cameras to absorb light to freeze, preserve, and render manipulable in images and icons the otherwise blinding, death-dealing power of atomic weapons.

**PRODUCING OPERATION IVY**

In November 1952 the United States carried out tests of two different nuclear devices in the Marshall Islands. The first was a test of a 10.4-megaton fusion device, or thermonuclear shot, known as MIKE, and the
second a test of a 550-kiloton fission bomb, known as KING. MIKE was the first detonation of a thermonuclear device by any state. Unlike the United States’ prior postwar Pacific test, Crossroads, but like Sandstone, and Greenhouse, Operation Ivy was a closely guarded state secret, or at least it was supposed to be. News of the test quickly leaked, apparently due to errant radio communications from ships involved in the test and to some letters written from the test site by personnel to friends and family. Still, the United States refused to officially acknowledge its thermonuclear device as such, admitting only that the test was relevant to thermonuclear questions. In the fall of 1952, the AEC ordered that information about the test should be strictly secured, as “the outcome of the thermonuclear experiment will exert greater impact upon U.S. Foreign Relations and Domestic Opinion.” All information about the MIKE test was to be cleared at the highest levels of government by AEC commissioners, who were to be in direct consultation with the president and the NSC. Moreover, as the AEC stated, “The release of photographs or motion pictures of Operation Ivy has not been approved and will not be anticipated in IVY information plans.”

Operation Ivy required some 14,000 personnel. They were prohibited from taking with them to the test site personal communication or recording devices, be they “personal cameras, film, or other photographic equipment . . . binoculars or telescopes, signaling devices (signaling guns or lights, flares, etc.), radio transmitters, [and] fireworks.” They were, moreover, prohibited from writing about the test or otherwise memorializing it. Bags would be checked. Background checks would be run. Discipline would be kept. Orders to be silent would be given. And yet 63 tons of cameras and camera equipment, together with 45 studio personnel, would be sent by LML to the test area for the filming, from earth and sky alike, of every aspect of the test, from assembly to detonation to departure.

LML’s charge was to document the test. Stanley Burris, commander of the Scientific Group for Joint Task Force 132, reported to his superiors, “A scientific historical documentary motion picture which summarizes the record of the operation will be produced. . . . The film is to document Operation Ivy, the problems encountered, and the solutions to these problems.” Moreover, LML’s still pictures, developed and printed within days of the test, would give those back in Washington—AEC commissioners, members of the NSC, and the president himself—a “first-hand” look at the test and its effects.
And yet LML clearly did more than document. If Joint Task Force 132 executed Operation Ivy, in important respects LML produced Operation Ivy, and doubly so. They produced both a narrative film and an event. In the first place, the acute narrative affordances of motion pictures gave LML the opportunity to frame the meaning of America’s entrance into a thermonuclear age in a way that no other medium could. Official written reports—and there were many of them—could document various phases and operations within the test, but they did not offer its story, nor did they attempt to do so. In the second place, cinema as technology and an art form could wrest the representation of the event from its analogical relationship to the represented and become the event. As Azoulay observes with respect to photography more generally, photographs are more than “the final product of an event”; they are events in and of themselves, having their own political ontology independent of their initial production.70 As we will see in the next section, Operation Ivy, the film, was indeed itself an event within the state.

But first let us consider the narrative production of Operation Ivy. The studio began with a script, penned from February to July of 1952, months before the MIKE detonation. The script was written in close consultation with scientists from Los Alamos, the same scientists who would oversee the test. Not surprisingly, therefore, Operation Ivy was scripted first as a story about the march of science and second as a story about the authority of what David Henry has called the “technological priesthood,” the Cold War caste of U.S. scientific experts given say over not only technical matters but political ones.71 LML, however, immediately confronted a problem in planning for the production of the script. The unit was assigned, as it had been at past nuclear tests, to the Military Division of Joint Task Force 132, the DOD wing of the thermonuclear test. This meant that they would be stationed with the military rather than the scientific team in the Marshall Islands, and consequently that they would not be privy to the activities of the scientists, including the Los Alamos scientist with whom they had worked in writing the script. Given the conflict between the story of science they would tell and their assignment within the Military Division, LML’s head, Lt. Col. James Gaylord, felt the 1352nd Photographic Squadron should be moved from the Military Division to the Science Division (thus reporting to the AEC rather than the DOD). As Gaylord explained to his air force superiors, the Military Division “presents only the routine logistic support” and logistics was uninteresting narrative ma-
trial: it “does not change, it does not present anything new to add to a documentary motion picture.” Rather, he continued, “it is in the Scientific Program that the heart of the documentary story lies,” and therefore it is to the Scientific Program that the 1352nd should be assigned. Air Force command agreed, and LML was allowed to reconfigure its operational chain of command for the sake of the story.

The concept behind the script, as one LML report said, was to offer the story of the dawn of thermonuclear weapons “through the ‘eyes’ of an impartial observer.” There was, to be sure, a bit of irony here, for unlike the Crossroads test in the Pacific, no outside observers were allowed to witness Operation Ivy. Instead, the outside, impartial observer had to be invented on film. At the same time, the appeal to an “impartial observer” was consistent with the recommendations of the DOD’s Ad Hoc Committee on Chemical, Biological, and Radiological Warfare to address weapons of mass destruction in a matter-of-fact, even “deadpan,” manner. For the part of the “impartial observer” LML chose a Hollywood actor. “The actor was Reed Hadley, star of radio and television (fig. 2),” LML reported to their commanding unit. “The reason that professional support was used was that the picture was written through the ‘eyes’ of an impartial observer, and the strength of the part had to be maintained throughout the entire picture.”

Hadley came to LML having worked for the First Motion Picture Unit in World War II and then having earned modest fame in the late 1940s and early 1950s in westerns and crime shows, among them Racket Squad, a “real-life” television crime show in the early 1950s that featured Hadley as a detective exposing frauds and grifters who tried to milk people of their money. In Hadley himself, therefore, the sensibilities of the military-industrial complex, the culture industry, and science would cross. Indeed, Hadley’s on-screen introductions to Racket Squad episodes would echo the script of Operation Ivy. Both would appeal to official culture, impartial observers, and science. Hadley would begin Racket Squad, too, with a pitch for science:

What you are about to see is a real-life story taken from the official files of the police racket and bunko squads, business protective associations, and similar sources by Philip Morris, a company whose product deserves your support and patronage. I smoke Philip Morris myself. I have for a long time because I know the Philip Morris manufacturing process and I am convinced that this cigarette is as fine as human care and scientific skill can make it.
In producing *Operation Ivy* LML would seek to establish the strength of the part of an impartial observer in a variety of ways, calling upon not only Hadley but a sound set, animations, an original musical score, indeed a whole production apparatus.

The 63-minute original version of *Operation Ivy* began at the “desk”—fabricated on an LML set—of Major General Clarkson, commander of Joint Task Force 132. Clarkson, much like Hadley on *Racket Squad*, introduced the story of the thermonuclear test, telling viewers that the account that followed was the official report on Operation Ivy “in film form.” The movie then cut away from Clarkson to the opening credits, written against the backdrop of a scene of waves gently rolling up on an empty beach and accompanied by orchestrated music. Viewers were then taken to the USS *Estes*, the command ship for the operation, where sailors were shown busily at work preparing for the test. Viewers then met Hadley, clad in a plain brown uniform, standing alone in a quiet space on the deck, sea in the backdrop. “Welcome aboard the USS *Estes*,” Hadley began. “We have

Fig. 2. Reed Hadley on the set of *Operation Ivy* (National Archives and Records Administration).
minutes to go before the first blast, MIKE shot of Operation Ivy,” he explained, stopping to light his pipe. “As you can imagine, feeling is running pretty high about now, and there’s reason for it. If everything goes according to plan, we’ll soon see the largest explosion ever set off on the face of the earth—that is, the largest that we know of.” Hadley then previewed the narrative structure of the film, pipe in hand, by explaining that he’d like to take the time before the detonation, scripted as some 59 minutes away, to “show you around . . . and introduce you to some of the people connected with this operation, and in general piece together the events which have brought us to this point.”

In this way, the script of Operation Ivy relied on two narrative devices. First, for suspense, the countdown: as the movie began, the countdown begins. The movie’s length matches almost minute for minute the scripted countdown’s length (though the detonation comes two-thirds of the way into the film). Second, characters: Hadley reported on the operation by moving through the ship talking to various key personnel about the test’s setup, its innovative technologies, and the various precautions taken to prevent mishaps. At points in the film, to “meet” various characters not on the USS Estes, the scene shifts to off-ship locations like Los Alamos, where plans are drawn, and Elugelab Island, where the device is erected.

All along, Hadley anchored the narrative by reminding viewers that they, and he, are in the middle of a dramatic countdown to a historic event. The MIKE detonation was described by Hadley as “one of the most momentous events in the history of science” and “the most powerful explosion ever witnessed by human eyes.” And Operation Ivy reminded its audiences that the operation was as adventurous as it was momentous: Los Alamos scientist Robert Graves appears onboard the USS Estes explaining to Hadley that the United States “must take risks” if it is to achieve “great gains.” Hadley soberly replies, “but then the uneasy state of the world puts everything on a gambling basis I guess.” In this way Operation Ivy scripted state science in the languages not only of historical necessity and scientific progress but in the character type of the political adventurer—at least of a kind, for Operation Ivy squarely addresses the gamble of nuclear testing by pointing, literally, to the personage of the nuclear technician. “Yes,” Graves responds to Hadley, “but not as much of a gamble as you might think.” He then points to an engineer standing upon the deck: “Take that man over there, he and
his company have put a great deal of thought into the engineering and design of ‘MIKE.’”78

The narrative of Operation Ivy was directed precisely to this point: while the politics of nations in a nuclear age is one big gamble, the science-and-technology competency of the United States means that even as the state pursues dangerous techno-military adventures, it does so fully in control of itself and its environment. The gamble, really, lies with the unpredictability of the Soviet response. The story of Operation Ivy, as scripted in Operation Ivy, is the story of America’s scientific adventures, in the hands of competent operators, in an uncertain world.

Operation Ivy reached its narrative high point as the countdown approached one minute. Military men with protective glasses assume the posture of spectators upon the deck of the ship, and other men hunched over consoles measure every gauge and dial on a second-by-second basis. When the detonation comes, Operation Ivy features a montage of mushroom clouds, followed by an extended account by an unnamed, off-screen narrator describing the effects of the blast: maps and charts are used, the blast hole is superimposed onto Washington, D.C., and MIKE’s effects are described in terms of the destruction it would do to New York City. The film then concludes with Hadley, now by himself on an empty beach, telling the viewers that though “It’s been a pleasure to bring you the story of Operation Ivy,” he nevertheless has “sort of an inadequate feeling.” “There’s so much more that could have been said,” he explains. Moreover, he continues, “You get a feeling that even now nothing is really over, that this is a breathing spell, like a lull in battle before the next attack.” Operation Ivy thus concluded with a sense of a coming battle built around a technological sensibility. Key to success, the film asserted, would be America’s technological and scientific competence and ingenuity in the hands of cool operators. America was on a course with destiny and would need cool operators like Hadley and the men on the USS Estes to lead the way.

**Screening Operation Ivy**

Only 177 persons were authorized to see this 63-minute original version of Operation Ivy, designated top-secret restricted data. Indeed, only three prints of the film were made by LML. General Clarkson reviewed the first cut of the film on March 9, 1953 and a final version on April 6; with his
approval, senior scientists at Los Alamos approved the final on April 9.\textsuperscript{79} On May 19, about six months after the November 1952 test, \textit{Operation Ivy} was screened for the AEC commissioners and the Joint Chiefs of Staff in Washington, D.C.\textsuperscript{80} It did not, apparently, make any major impressions, presumably because the AEC commissioners and the Joint Chiefs were already thoroughly familiar with the test and quite familiar with its imagery, having been forwarded photo books of the MIKE shot within days of the detonation.\textsuperscript{81}

Instead, it would take President Eisenhower to generate enthusiasm about \textit{Operation Ivy}. In June of 1953 the president and members of his cabinet would see the film. Eisenhower reacted strongly. He was apparently so impressed with the film that he exclaimed that every American should see it.\textsuperscript{82} While concerned about keeping its scientific and technical secrets, the president requested that a new, “Secret” version of the film be cut for a broader audience, including some members of Congress.\textsuperscript{83} LML went to work and would remain busy with various cuts and edits to \textit{Operation Ivy} for most of the next nine months.

The Eisenhower administration was still caught up in debates over the meaning of “candor” and was slowly working its way toward what would become “Atoms for Peace.” \textit{Operation Ivy}, as things turned out, ended up being at the center of various debates within the administration in 1953 and 1954 regarding the nature and limits of “candor.” Indeed, it would be instrumental in a larger debate within the Eisenhower administration about the meaning of such rich and complex topics as democracy, responsibility, and authority within a nuclear age.

Broadly speaking, \textit{Operation Ivy} produced three different responses within the Eisenhower administration, each representing not only distinct lines of debate but distinct institutional interests and, as importantly, distinct rhetorical forms and political sensibilities. To begin with, the AEC, under the chairmanship of Lewis Strauss, would see in the film a state secret to be closely guarded. Strauss succeeded Gordon Dean on July 1, 1953. The two men had clashed amid the McCarthyist furor over Robert Oppenheimer, with Strauss (angry at Oppenheimer for a variety of reasons, including Oppenheimer’s opposition to the thermonuclear bomb) leading the attack against Oppenheimer and Dean coming to his defense.\textsuperscript{84} Moreover, whereas Dean had inherited Truman’s commitment to the “civilian” stewardship of atomic energy, under Strauss’s leadership the AEC’s institutional
interests were framed in terms of the arms race with the Soviets—Strauss’s primary concern was to safeguard American atomic superiority by keeping the Soviets in the dark.85 The AEC thus worked within the rhetorical forms of secrecy and disclosure and developed a political sensibility centered on control.86

The Federal Civil Defense Administration (FCDA), on the other hand, was most immediately concerned with mobilizing citizens and their local leaders on behalf of civil defense. For them, *Operation Ivy* represented a means of “candor” with the American public about the effects of nuclear weapons, and thus ultimately represented a means of activating new forms of citizenship and federalism for a nuclear age. As we will see, the film also represented for the FCDA a means of thinking about the democratic responsibilities of a nuclear state. The FCDA worked between the rhetorical forms of “free speech” and “emotion management,” seeing public speech as a means of engendering public action. The political sensibility of the FCDA centered on the inculcation of dispersed, “democratic” action on behalf of the nation.

Finally, Eisenhower’s OCB, his chief “public information” clearinghouse and the de facto ultimate arbitrator of *Operation Ivy*’s distribution, would work closely with the CIA in approaching the film as a means of massaging public and world opinion regarding America’s nuclear pursuits. For the OCB, *Operation Ivy* was a means not just of “emotion management” through propaganda but of orchestrating support for the United States at home and abroad through the careful management of “information.” The OCB in fact mediated between the AEC’s concern with secrecy and disclosure and the FCDA’s concern with “free speech” and “emotion management,” always looking to strike a balance between the competing impulses of the nuclearized state. The political sensibility of the OCB, therefore, centered on the ideological and ideational, especially the orchestration of an ideology of freedom and an idea of a free and powerful America.

But these rhetorical forms and political sensibilities did not appear in an a priori fashion. Rather, they had to be developed and worked through as the various agencies discussed, debated, and worried about common objects. The thermonuclear bomb certainly had been one such object, but by the fall of 1953 it was not the device itself but rather its rhetorical representation in *Operation Ivy* that became the common object around and through which these agencies approached the sensibility of the state. In the remainder of
this section we offer an account of the lines of debates surrounding _Operation Ivy_ by tracing the history of its screening from the summer of 1953 to the spring of 1954, paying special attention to implicit rhetorical forms and developing political sensibilities.

Eisenhower’s enthusiasm about _Operation Ivy_ set in motion a series of discussions between the AEC and FCDA through the summer of 1953. Meanwhile, LML quickly set to work on a Secret version of the film, in accordance with Eisenhower’s request, having it ready in a matter of days. On June 17, Gordon Dean, who would come to the end of his chairmanship of the AEC two weeks later (succeeded by Lewis Strauss), notified Eisenhower that the Secret version was ready for presentation “to any groups you may direct to see it.” Things seemed to be moving in the FCDA’s direction, with Eisenhower apparently leaning toward mobilizing the nation for a thermonuclear age over and against closely guarding America’s thermonuclear secrets.

In September, however, the AEC put a temporary stop on “candor.” When the Secret version of _Operation Ivy_ arrived in Washington, D.C. for screening, AEC chairman Lewis Strauss informed the FCDA’s head, Val Peterson, that no one could view the film without a “Q” clearance, all but defeating the purpose of the Secret version. (A “Q” clearance granted access to Top Secret Restricted Data. The viewing of a document rated as Secret Restricted Data should require the lesser “L” clearance.) The FCDA was frustrated, for it had been hoping that a public version of _Operation Ivy_ would be next in line, and it did not anticipate such AEC opposition to screenings even of the Secret version.

The FCDA appealed directly to the White House. The acting administrator of the FCDA, Katherine Howard, wrote a four-page memorandum in September to Eisenhower’s special assistant for psychological warfare and OCB head, C. D. Jackson, about the differences between the FCDA and the AEC. More than arguing that it would be good for Americans to see the film to motivate them to take civil defense seriously—the argumentative course the FCDA had adopted since the summer—Howard enumerated an argument for the state’s democratic responsibility for releasing at least some version of _Operation Ivy_ to the public. In doing so, she both extended and modified the argument Oppenheimer had made for “candor” and meanwhile suggested an alternate political sensibility.
Howard began by reminding Jackson of the visceral reaction Eisenhower had to the film. “For the past several weeks the Administrator, Admiral Strauss and the members of the FCDA and AEC staffs have had under discussion the possible declassification for public showing of portions of the film on thermonuclear tests at Eniwetok last year. This grew out of a remark by the President, after he had witnessed the picture, to the effect that every American should see it.” Howard then explained that the AEC and FCDA had been debating the release of a public version of *Operation Ivy* but were stuck on the question of the “declassification of hitherto restricted data” (minimally, the government would have to publicly admit the extent of their thermonuclear efforts). “Basically,” Howard continued, “it gets down to how much information should be given to the American people. Should it be as much as possible or as little as possible?” Indirectly referring to the AEC, she noted that one “school of thought” holds that “nothing should be released unless there is a real necessity for making it public.” To this position she opposed another, clearly her own and that of the FCDA, arguing first of all that “In a democracy, the people are entitled to an accounting by their government.” “The burden of proof,” she continued, “should be on those who wish to suppress the facts.” If the release of information would endanger American citizens, then it should be kept secret. Otherwise, Howard argued, it should be made public.

*Operation Ivy*, Howard argued, represented an opportunity for the federal government to present “the facts.” The current policies of the government, however, risked engendering two adverse psychological reactions among the people, panic and escapism. “The ability to reason or to take corrective action becomes paralyzed” among all the speculation, misinformation, and rumor. The H-Bomb, she claimed, would do horrible damage, but it is “not the absolute weapon. Its effects would be devastating, but they need not be catastrophic—if we have an informed public.”

What is needed now, in our view, is a calm, unemotional and authoritative exposition of the essential facts about thermonuclear weapons, their probable effects, and civil defense measures to minimize these effects upon life, property and national morale.

Howard concluded her memo by arguing for a new set of criteria when thinking about the release of public information on nuclear weapons,
asking the White House to weigh the real risks of secrecy. She asked that the president take such factors into account and “enunciate the fundamental policy to be followed by all departments of government.” Howard thus argued for a coherent and consistent democratic sensibility for the thermonuclear state, one that operated, as a matter of assumption, according to the principle that publicity was necessary both for public safety and democratic society.89

In one respect, at least, the FCDA would get its way. In October, the administration began discussing an unclassified cut of Operation Ivy to be shown at the U.S. Conference of Mayors to be held at the White House in December. The FCDA argued that Operation Ivy was needed to communicate to the mayors the need for “new concepts of civilian defense” in light of megaton weaponry. In November of 1953, LML completed a version of the film for the conference. In fact, they were more than prepared to do so, for as far back as the spring of 1953 LML, ignoring AEC orders, began work on an unclassified version of Operation Ivy. LML’s head, Lt. Col. Gaylord, “was certain that demands would be made for a ‘public release’ picture,” LML reported later.90 It was as if for them the existence of a well-crafted motion picture demanded a public screening: Operation Ivy drew on the cinematic conventions of Hollywood, and perhaps LML’s Lt. Col. Gaylord thought it deserved a Hollywood-size audience. Or it may have been the specter of the Super: Gaylord may have felt that Operation Ivy, like the thermonuclear device itself, deserved to be seen, heard, and felt. In either case, he allowed the studio to move forward with the editing of an unclassified version of the film despite explicit instructions from above not to do so. It was a move that would prove prescient.

When considering the presentation of Operation Ivy to the mayors that fall, Eisenhower’s NSC worried that news of the film, let alone the film itself, “would be likely to create anxiety and disturbance” among the American public. The CIA’s Allen Dulles added that the film could stir “neutralist feelings” abroad. On the other hand, special assistant to the president for national security affairs Robert Cutler echoed FCDA chairman Val Peterson in arguing that Americans needed to be alerted out of their indifference, even scared, to meet the challenges of civil defense. Eisenhower shot back at Cutler, arguing no progress could be made at all by “scaring people to death.” Rather, the people of the United States needed “real and substantial knowledge.”91
The AEC saw the writing on the wall. Though they had wanted to closely guard all images of the MIKE test, they saw in the unclassified “For Official Use Only” version of the film LML cut for the mayors’ conference the beginning of a legitimation crisis. The AEC forecasted that upon seeing *Operation Ivy* the mayors would spread the word to the press, even though they weren’t supposed to, at which point “the Government’s reputation with the media of mass communications and the public for not withholding unclassified material from publication is likely to be impaired.” The “pressure for public showing of the declassified film will become very strong,” the AEC continued.92

Therefore, the AEC and FCDA reached something of a détente. If the mayors were going to see the film, the best thing to do, the AEC concluded, would be to go ahead and release the film shortly after the mayors’ conference, perhaps with a message appended to the front of the film from the president or the FCDA’s Peterson.93 Indeed, in January 1954, the month after the mayors’ conference, Peterson recorded an introduction at the LML studios under the direction of MGM Studios head George Sidney. Eventually, the final public version of the film would also include a clip of Eisenhower delivering his Atoms for Peace speech.

That speech, delivered on December 8, 1953, came but a week before the mayors’ conference at the White House, and Eisenhower’s OCB, under the leadership of Jackson, would use the mayors’ conference as the first instance of their broader “Atoms for Peace” propaganda campaign by diffusing responsibility for a nation living under thermonuclear peril away from the federal government. After welcoming the mayors, Eisenhower showed them the unclassified “For Official Use Only” version of *Operation Ivy*, finalized at LML the month before.94 The mayors were told to watch the film closely, but they were ordered to remain hush-hush before their constituents about its contents. Eisenhower made his goal in showing the film explicit to the mayors: “I know of no other time when the President of the United States felt it necessary to invite to a conference the Mayors of our cities, in order that they might together discuss . . . national security.”95 He thus offered in *Operation Ivy* the “facts,” echoing the position of Oppenheimer and the FCDA. Eisenhower told the mayors, “Ordered haste will save you, and panic will destroy you. So it is, first of all, against the incidence of panic that we must be prepared. In other words, there must be understanding produced by leadership, inspired leadership—leadership that is
The mayors of the cities of America, the administration therefore argued, had to come to see and feel themselves as at the frontlines of civil defense. As Jackson told the mayors,

It does not make a bit of difference how much military brass there is in this town, or how many planning groups there are solemnly grinding out mimeographed sheets. If trouble comes—and trouble may very well come—the pay-off is how the people will behave. And how the people will behave is not something that can be ordered from Washington. There is too big a gap between the man in the street in your cities and towns and the White House or Capitol Hill. . . . After the bomb has gone off, those who are left will not turn to some anonymous and mysterious “they” in Washington; you will be the first person to whom they will turn.

The animated maps in *Operation Ivy* made the case, demonstrating as they did just how extensive the damage would be if the Soviets dropped a thermonuclear bomb (toward which they were working at the time) on New York and Washington, D.C. The mayors watched the images as the off-screen narrator, working off estimates the scriptwriters had gotten from Los Alamos scientists, warned of unheard of destruction to major American cities. *Operation Ivy*, the film, was the event the mayors of America sensed and by which they were introduced to the new “common sense” of the thermonuclear state.

The AEC, however, was right about the mayors’ reactions. Rather than marching to the administration’s orders, Houston mayor Roy Hofheinz, a Democrat, soon appeared on television to declare that the Eisenhower administration, and not just the AEC, was being too secretive, and indeed was not doing “all it should do to inform the American people.” Moreover, he argued that the Republican government was expecting far too much from local mayors in the way of civil defense coordination. Meanwhile the *Daily Boston Globe* ran a story on December 19 on a secretive “H-Bomb” movie shown to the mayors, which read in full:

Two Mayors tonight said they were shown a classified movie of a hydrogen “device or bomb” explosion while at a Mayors’ conference in Washington this week. Mayor Clyde Fant of Shreveport first said he “understood” the explosion shown in the film was of an “H-bomb,” but later denied he was certain.
He then said he was told not to give out information on the movie, and asked not to be quoted. In Atlanta, Mayor William Hartsfield said the movie was of an explosion caused by some type of hydrogen device, but said there was no indication whether the object exploded was a portable bomb or some permanent structure. Although President Eisenhower has indicated the United States has a whole family of hydrogen weapons, it has never been officially confirmed that a workable hydrogen device was small enough to be carried by airplanes as a bomb.99

Word about the film having thus gotten out, various members of Congress desired to see the “Official Use Only” declassified version of *Operation Ivy* shown to the mayors. In early February 1954 members of Congress viewed the film. They in turn began to push the Eisenhower administration to release the film to the public.100 Consequently, the OCB began considering the nature and timing of a public version of the film. They ultimately decided, directly addressing the aesthetic quality of the film, that only a 28-minute *black-and-white* version of the original color film would be released, that the timing of the release would be delayed until the spring, after the Berlin Conference summit between the United States and USSR, and that foreign release of the film would be as restricted as possible.101 Thus, after nearly nine months of debate, the public release of *Operation Ivy* would quite literally be muted.

The short unclassified black-and-white version of the film was finally screened to the public in April 1954, both on television and in movie theaters. The film was also widely distributed among the armed forces. LML claimed the film “was in greater demand than any picture produced by LML and was given wider distribution than any service film produced since World War II.” They claimed that it garnered “considerable praise,” especially since “it gave the general public a chance to see the vast preparations and scope inherent in an atomic test.”102 As we will see, however, praise for the film was not universal.

Importantly, the unclassified version of *Operation Ivy* appeared just as the Eisenhower administration was wrestling with a new major thermonuclear crisis. On March 1 the United States detonated in the Marshall Islands “Castle BRAVO,” a test of a weaponizable thermonuclear device. BRAVO, the largest reported atmospheric test ever carried out by the United States, ended up producing fallout well beyond AEC predictions, contaminating
hundreds of Marshallese as well as 29 Japanese fishermen. The shot made news around the world. America’s thermonuclear cat was finally out of the bag. Indeed, the Eisenhower administration had now moved beyond the fantastic image of the “Super” and had a real weapon in hand.

It likely did not bother the Eisenhower administration that the public version of Operation Ivy included some technological and scientific matters that had seemed sensitive to the AEC months before, like the yield of the explosion and the fact that the “device” was not yet weaponized. The government was quickly moving beyond such concerns. In fact, the president may have been especially glad for its release. In a March 31, 1954 press conference with AEC chairman Lewis Strauss, Eisenhower interrupted Strauss just as the latter was beginning to suggest the yield of BRAVO to journalists. When a reporter asked Strauss to “describe the area of the blast, the effectiveness of the blast, and give a general description of what actually happened when the H-Bomb went off,” the AEC chairman began his response, “The area of the blast, would be about—.” However, Eisenhower interrupted: “Why not depend on these pictures they are all going to see?” Strauss quickly got the message, continuing, “I understand you are going to see a film, a picture, of the 1952 shot. The area, if I were to describe it specifically, would be translatable into the number of megatons involved, which is a matter of military secrecy.” The BRAVO crisis meant as well that it probably did not bother the administration that Operation Ivy was, in the eyes of some cultural elite at least, an unimpressive production. In a somewhat anticlimactic conclusion to the nearly two-year story of Operation Ivy, the New York Times reviewed the film negatively on April 2, 1954. Reviewer Jack Gould described the film as overly theatrical and emotional, and its explanation of the complex installation of the device in the Pacific “bewildering.” Still, Gould was not strictly negative. “The truly effective part of Operation Ivy,” he admitted, “came in those few moments when the scope and size of the destruction wrought by the explosion were explained by maps, pictures and charts.” And so, after all this, it was the legibility of the state that Operation Ivy made sensible.

**CONCLUSION**

*Operation Ivy*, the film, would make Operation Ivy, the nuclear tests, an object of sense and sensibility not only to AEC Chairman Dean, the Joint
Chiefs of Staff, and President Eisenhower and his cabinet, but to congress-
men, mayors of major urban areas, and eventually American and global
publics. The story of the circulation of *Operation Ivy* begins, and could well
have ended, with the president and his closest advisers, who watched the
film in June 1953. The president, however, apparently felt others must see
the film with him. Though AEC plans had called for all pictures of Opera-
tion Ivy to remain strictly classified, and though the United States had not
yet officially admitted possession of a thermonuclear device, the pres-
ident, coaxed on by Civil Defense, pushed the film forward into various cuts
and classifications for several cleared audiences right up to December 14,
1953, when he opened the U.S. Conference of Mayors at the White House by
warning America’s mayors of thermonuclear attacks on their cities.

Indeed *Operation Ivy*, the test, did not remain an official secret beyond
the spring of 1954, in part because the president and FCDA felt that
*Operation Ivy*, the film, should not remain a secret. As an institution, the
state was trying to feel its way into the thermonuclear age, concerned on
the one hand with maintaining the legitimacy of its own activities, and on
the other with rendering a thermonuclear world not only legible but also
*sensible*. The state was trying in various ways to construct a political sensi-
bility for a nuclear age. That a motion-picture film would, even more than
the Bomb itself, become the object around which this effort would take form
may seem odd. But here we must recall that the Super was both an image and
a story before it was a practical technology.

Indeed *Operation Ivy*, the film, rhetorically negotiated the very crises it
would perpetuate. By offering the story of the thermonuclear age through
“the ‘eyes’ of an impartial observer,” *Operation Ivy* drew on the capacity of
motion-picture film not only to address subjects and form subjectivities but
to negotiate sensibilities. In the way stage actors have to overplay the part to
be seen playing it at all, so LML dramatized “objectivity” to render to the
state its own sensibility before the drama of the thermonuclear bomb. But
playing the part was not limited to the subjects of the film. As Edwin Black
has noted, when we go to the theater we are invited to become “a special,
social being with a special, social set of sensibilities and constraints.” Au-
diences too, that is, are invited to be “an actor playing the part.” That
*Operation Ivy* was obviously stylized was an index of the way in which it was
trying to get audiences to also play their parts in the drama of the thermo-
nuclear age.
On the other hand, that the *New York Times* panned *Operation Ivy* as being overly theatrical suggests just how indeterminate the sensibility of the new thermonuclear state was in the 1950s. To the scriptwriters and producers of *Operation Ivy* at LML, “impartiality” had to be dramatized in the terms of scientific progress, technological competence, and political-historical adventure. To the *New York Times* reviewer, on the other hand, the advent of the thermonuclear age—while no less “objective”—appeared more as a brute fact than an epochal story. Before this brute fact the technologies of legibility—maps, charts, diagrams, and so on—felt a more appropriate medium than the theatrical technologies so obviously aimed at appealing to and forming sensibilities.

In fact, the film and its various receptions would anticipate the course and contradictions of the thermonuclear state in the decade to come. Over and over, thermonuclear weapons would appear variously as fantastic images of an apocalyptic history, as products of historical necessity, or as tools of Cold War calculus. What would be missing from this spectrum of appearances and their corresponding sensibilities, however, would be anything approximating the “common sense” the FCDA’s Howard had argued for, a democratic sensibility.

**NOTES**

1. The United States acquired the Marshall Islands after winning them from Japanese control in World War II. There had been considerable debate within the Truman administration about outright annexation of the islands, with the navy in particular arguing that it was within the rights of the United States to simply bring them and their peoples under U.S. authority as part of the spoils of war and in the name of protecting the Pacific in the future. However, the navy’s argument butted against American anti-imperialist claims. Eventually, the United States settled on acquiring the islands under the auspices of the United Nations. However, they asked for and received a special trusteeship, a “strategic trust,” meaning that the United States could close the islands off to use them for military and security purposes. This strategic trusteeship coincided with the decision to make the islands the site of the first postwar American nuclear tests. For more, see Jonathan M. Weisgall, *Operation Crossroads: The Atomic Tests at Bikini Atoll* (Annapolis, MD: Naval Institute Press, 1994), 310–13.

3. LML worked closely on some of the footage with the military contractor Edgerton, Germehausen, and Grier (EG&G). EG&G was started in the 1930s to capitalize on the electronic strobeoscope technology invented by the firm’s founder, MIT’s Harold Edgerton. In the 1940s, Edgerton and his colleagues did contract work for the Manhattan Project, applying the timing technologies of Edgerton’s strobe technology to build the firing mechanism for the Fat Man atomic bomb. EG&G would go on to be one of the most important contractors in the United States’ Cold War nuclear weapons program, serving as both its chief contractor for high-speed photography and as the designer of new timing mechanisms that would detonate nuclear devices in the proving grounds of the Pacific and Nevada.


7. The issue was framed in the Truman and Eisenhower administrations as “candor”—how candid to be with the American people about nuclear weapons. The fear shared by both Truman and Eisenhower was alarming Americans to a point of hysteria or inaction. For more on discussions of candor, see Ira Chernus, *Eisenhower’s Atoms for Peace* (College Station: Texas A&M University Press, 2002); and the documents reprinted in section 3 of Philip L. Cantelon, Richard G. Hewett, and Robert C. Williams, *The American Atom: A Documentary History of Nuclear Policies from the Discovery of Fission to the Present* (Philadelphia: University of Pennsylvania Press, 1984).

8. American allies worried regularly about the danger of a nuclear World War III. The issue took on special importance amid the war in Korea, where the British, for
example, were worried about the eruption of a “general atomic war” if the United States decided to use nuclear force in Korea (see Richard K. Betts, *Nuclear Blackmail and Nuclear Balance* [Washington, DC: Brookings Institution Press, 1987], 34). So too amid the advent of Eisenhower’s “New Look,” which placed a premium on nuclear deterrence, Eisenhower’s National Security Council worried regularly about alarming allies (see, for example, John Lewis Gaddis’s discussion of the issues in *Strategies of Containment: A Critical Appraisal of American National Security Policy during the Cold War* (New York: Oxford University Press, 2005), chap. 5.


11. The possibility of a “demonstration” of the atomic bomb’s power as a means of war was raised in the so-called “Franck Report,” or “Memorandum on Political and Social Problems of the Bomb by Scientists at the Metallurgical Laboratory of the University of Chicago,” June 11, 1945, signed by James Franck (chairman), Donald J. Hughes, J. J. Nickson, Eugene Rabinowitch, Glenn T. Seaborg, J. C. Stearns, and Leo Szilard. See [http://www.nuclearfiles.org/menu/key-issues/ethics/issues/scientific/franck-report.htm](http://www.nuclearfiles.org/menu/key-issues/ethics/issues/scientific/franck-report.htm) (accessed October 8, 2014).


14. Indeed, Oppenheimer’s opposition to the Super was not strictly moral. His General Advisory Committee recommended the pursuit of smaller rather than larger nuclear weapons, shifting strategy away from what would become deterrence to a more traditional tactical approach. As for the technical difficulties of a fusion weapon, though the fusion process was well understood (Hans Bethe explained the fusion process as early as 1938—before the fission process was adequately understood), how to create it in a controlled manner was not. Edward Teller aggressively pursued fusion’s experimental realization both during and after the war. He believed that the best way to create a fusion reaction was to create the exceptionally high temperatures it required through a fission reaction. This technical solution, however, would divert plutonium production away from fission bombs to an as yet unrealized fusion...
bomb—creating yet another set of problems for Teller and others pushing forward the fusion bomb. Then there were further problems having to do with the liquefaction of deuterium and tritium and, once liquefied, containing the liquid long enough to create a self-sustaining reaction. These problems were eventually resolved as a new means of assembly was devised (the “Teller-Ulam” design) and a solid, lighter-weight deuterium-tritium source was discovered in lithium deuteride (O’Keefe, *Nuclear Hostages*, 142–44, 151, 159, 162).

18. “Public Information Policy on Biological Warfare, Radiological Warfare, and Chemical Warfare” and “Excerpts from Report of the Secretary of Defense’s Ad Hoc Committee on Chemical, Biological, and Radiological Warfare, 30 June 1950”; and “Memorandum for the Secretary of Defense from DOD Office of Public Information Director Clayton Fritchey, 9 October 1951,” each of which can be found in Box 37, “SMOF: Psychological Strategy Board File,” Papers of Harry S. Truman, Harry S. Truman Library.
33. Memorandum from Director to General Staff, Foreign Operations Administration, “Comment on Thermonuclear and Atomic Weapons,” October 8, 1953, Disaster File, Dwight D. Eisenhower Presidential Library, Box 6.
34. Kenneth Osgood, Total Cold War: Eisenhower’s Secret Propaganda Battle at Home and Abroad (Lawrence: University Press of Kansas, 2008), 156.
47. Hariman, *Political Style*.
50. Scott, *Seeing Like a State*.
53. As Carey writes of McLuhan, “McLuhan erased the distinction between art and utility, between aesthetic action and practical form. Everyday objects—cars, clothes, and lightbulbs—were governed less by utility than by aesthetics: their meaning was to be sought in a principle of taste rather than a principle of interest and action” (Carey, “The Roots of Modern Media Analysis,” 40). Oppenheimer and other nuclear scientists, in fact, were arguing for such a “hermeneutic turn” with respect to the new technology—indeed “new media”—of nuclear weapons well over a decade before McLuhan’s insights were popularized in *Understanding Media: Extensions of Man* (Cambridge, MA: MIT Press, 1964).

60. See Vinzenz Hediger and Patrick Vonderau, eds., Films That Work: Industrial Film and the Productivity of Media (Amsterdam: Amsterdam University Press, 2009).


63. See Hogan, Cross of Iron, 159–264 for an extended discussion of the battles between the air force and the navy for defense appropriations.

64. Virillio, War and Cinema.

65. On EG&G, see note 3.


69. “First-hand” is how General Clarkson explained the impact of pictures of the nuclear tests to Gordon Dean in 20 November 1952. “Note by the Secretary (R. B. Snapp), Subject: Completion of Operation Ivy—Letter from General Clarkson,” Department

70. Azoulay, Civil Imagination, 23–24.


73. “History of 1352d Motion Picture Squadron Lookout Mountain Laboratory, 1 July 1952 to 31 December 1952,” Air Force Historical Archives, Maxwell Air Force Base.

74. The reference to “deadpan” was that of Edward Barrett, in a memo to James Webb at the Department of State concerning PSB efforts in the wake of the Ad Hoc Committee report. Indeed civil defense films during the early 1950s would lean heavily on a matter-of-fact “documentary” style (Edward Barrett to James Webb, September 26, 1951, Box 37, “SMOF: Psychological Strategy Board File,” Papers of Harry S. Truman, Harry S. Truman Library). An October 9, 1951 memo from the DOD’s Office of Public Information held out the civil defense “documentary” Survival Under Atomic Attack as exemplary of its efforts. The film, made by United World Films, Inc.’s Castle Films, begins with its narrator, Edward R. Murrow, declaring, “Let us face without panic the reality of our times, the fact that atom bombs may someday be dropped on our cities, and let us prepare for survival by understanding the weapons that threaten us.” Survival Under Atomic Attack insists “production must go on” in the factories of major cities even in the case of atomic attack and adds, “Our offices and homes will also be posts of duty not to be abandoned.” See Survival Under Atomic Attack in the Prelinger Archives of the Internet Archive at https://archive.org/details/Survival_Under_Atomic_Attack_E01425_11_23_59_18 (accessed June 18, 2014).

75. “History of 1352d Motion Picture Squadron Lookout Mountain Laboratory, 1 July 1952 to 31 December 1952,” 3.

76. For more on Racket Squad see the Internet Movie Database page at http://www.imdb.com/title/tt0042139/. Episodes may be found on the Internet Archive at https://archive.org/details/RacketSquadTheSaltedMine1951.

77. As quoted in Vincent Terrace, Television Introductions: Narrated TV Program Openings since 1949 (Lanham, MD: Scarecrow Press, 2014), 114.


80. “History of 1352d Motion Picture Squadron Lookout Mountain Laboratory, 1 January 1953 to 30 June 1953,” 32.

81. “Note by the Secretary (R. B. Snapp), Subject: Completion of Operation Ivy—Letter from General Clarkson.”


87. Gordon Dean to Dwight D. Eisenhower, June 17, 1953.

89. Katherine G. Howard to C. D. Jackson, September 16, 1953.
91. Minutes from the 185th Meeting of the NSC, February 17, 1954, NSC Series, Box 5, Ann Whitman Files, Dwight D. Eisenhower Presidential Library.
93. “Note by the Secretary (R. B. Snapp), Subject: Film on Operation Ivy.”
94. For evidence that Eisenhower himself pushed the lower classification versions of Operation Ivy see Dean’s letter to Eisenhower dated June 17, 1953. Letter cited at note 83.
95. Gordon Dean to Dwight D. Eisenhower, June 17, 1953.