

Whose Finger Is on the Button?

Nuclear Launch Authority in the United States and Other Nations

HIGHLIGHTS

In the United States the president has unchecked authority to order the use of nuclear weapons for any reason, whether as a first strike or in a retaliatory attack, without consulting with advisers—much less following their advice. This “sole authority” approach, a remnant of the Cold War, is both risky and unjustified. There are viable alternatives; indeed, the eight other nations that possess nuclear weapons have a variety of procedures for deciding to use them, many of which involve more than one decisionmaker. The United States should establish a new system that requires multiple decisionmakers to authorize the use of nuclear weapons.

In the United States, the president has the sole authority to order the use of nuclear weapons, for any reason and at any time. This system has been in place essentially since the beginning of the Cold War.

This is not to say that there hasn't been confusion about it—President Kennedy himself was not sure whether he had the authority to order a nuclear launch on his own, or whether it would require consultation with advisers. In 1962, he asked his military advisers to answer several written questions about the use of nuclear weapons, including “Assuming that information from a closely guarded source causes me to conclude that the U.S. should launch an immediate nuclear strike against the Communist Bloc, does the JCS [Joint Chiefs of Staff] Emergency Actions File permit me to initiate such an attack without first consulting with the Secretary of Defense and/or the Joint Chiefs of Staff?” (Trachtenberg 1999). The answer was “yes.”

What's more, the US system was *designed* specifically to remove obstacles to a president launching a nuclear attack rather than to create a deliberative process, so that the United States could respond quickly to a Soviet nuclear attack. Presidential sole authority was considered a feature, not a bug. Of course, the assumption was always that the president would consult with advisers to the extent possible given the time available, and would treat a launch as the monumentally important decision that it is. The system did not address the possibility that a president might decide unilaterally to launch a first strike against a US adversary—either without consulting his or her advisers or against their advice.



An unarmed Minuteman III intercontinental ballistic missile is launched over the Pacific Ocean from California's Vandenberg Air Force Base during a flight test in May 2017. These missiles can be launched in a matter of minutes once the president orders their use—which he has the sole authority to do.

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However, this possibility became all too real in 1974. During the Watergate scandal, President Nixon was drinking heavily and many advisers considered him unstable. In the summer of 1974 Nixon told reporters that “I can go back into my office and pick up the telephone and in 25 minutes 70 million people will be dead” (Rhodes 2014). Secretary of Defense James Schlesinger reportedly instructed the Joint Chiefs of Staff that “any emergency order coming from the President”—such as a nuclear launch order—should go through him or Secretary of State Henry Kissinger first (McFadden 2014). But in point of fact, Nixon was correct: Schlesinger had no legal authority to intervene. It is not clear what would have happened if an order from Nixon had actually come since, under the US system, the president has the authority to issue such an order, and the military is obligated to carry it out.

In any event, this episode did not lead the United States to change its policy of presidential sole authority. It did, however, illustrate that the risk of placing the authority to order the use of nuclear weapons in the hands of any one person is not theoretical.

Launch-on-Warning and Sole Authority

This sole authority policy is an artifact of the Cold War, when the greatest fear was a massive bolt-from-the-blue first strike by the Soviet Union that would wipe out the United States’ ability to retaliate using nuclear weapons. The fear was that US land-based missiles would be destroyed by the incoming Soviet missiles, which require only 25 minutes to reach the US mainland. Beginning in the 1950s, the United States built a system of sensors to detect an incoming attack and kept its land-based missiles in a state of readiness so they could be launched within a matter of minutes after receiving warning of incoming Soviet missiles, before the missiles could reach their targets. This system is known as “launch-on-warning.”

Given the short flight time of the attacking missiles, once they were detected the United States would be left with roughly 10 minutes for a launch decision. No one wanted the president to be encumbered with red tape while Soviet missiles were incoming, so the system was set up to allow him or her to launch as quickly as possible, with no other input required.

For the past roughly 50 years, part of this system has been the so-called nuclear football—a briefcase containing communications equipment and a book laying out various attack options, from striking a small number of military targets to launching an all-out attack against Soviet nuclear forces and military installations, some of which are near large cities. It is carried by an aide who stays by the president’s side at all times. The president carries a card—the “biscuit”—with a code that changes daily and would be used to authenticate a launch order. To order the use of nuclear weapons in retaliation or as a first strike, the president calls the duty officer at the National Military Command Center, reads the code on the biscuit, and specifies what attack option to use. Once the president’s identity is confirmed, the duty officer passes the order to the US Strategic Command, which oversees nuclear weapons. No other official need be involved. The time from when the president issues the order, to when launch crews receive and execute it, would be only minutes.

To this day, the United States keeps its land-based nuclear-armed missiles on continuous high alert, and maintains the option of launching them on warning, meaning that the president might need to make a decision to launch these weapons within the space of 10 minutes. This would make it difficult to include additional people in the decisionmaking process.



An aide carries the “football”—a briefcase containing the communications equipment and information necessary to allow the president to order a nuclear attack—onto Air Force One in 2017. The football accompanies the president at all times.

Let's Not Be Hasty

The US system, in which the president is granted sole authority to order the use of nuclear weapons, is both risky and unjustified.

The situation in which an immediate launch decision is needed is the exception, not the rule. For the vast majority of scenarios, there would be time to include multiple decision-makers. For scenarios in which the United States was not under nuclear attack, and instead was contemplating the *first* use of nuclear weapons, a short decision timeline is not necessary, and therefore neither is such a highly centralized decisionmaking process.

A second scenario is a large-scale nuclear attack by Russia that is designed to disarm the United States. Such an attack is infeasible because the United States maintains most of its nuclear weapons on submarines, which are virtually invulnerable when they are at sea, and which would remain available to retaliate even if the decision to do so was not made for hours or days. This would remain the case even if the United States removed its land-based missiles from high alert and eliminated its launch-on-warning option, and Russia destroyed these missiles in their silos.

The remaining scenarios are those in which the United States or its allies are attacked with a small number of nuclear weapons. Other than Russia, the two potential US adversaries that have nuclear weapons—China and North Korea—have only a small number and any attack would therefore be a limited one. Any such attack could not remove the US ability to retaliate. There would be no need for immediate retaliation, and there would be time for multiple decisionmakers to determine the best course of action in response, and make a decision about whether to use nuclear weapons.

Most nuclear-armed states have put in place systems that—at least in theory—limit the ability of any one individual to independently order a launch.

For the first time, US policymakers have grown seriously concerned about presidential sole authority, and are trying to place limits on it. In particular, earlier this year, legislation was introduced in both houses of Congress to require that Congress approve any presidential decision to order a first-strike nuclear attack against a country that had not already used nuclear weapons (US Congress 2017). However, the legislation does not restrict presidential authority to use nuclear weapons to retaliate against a nuclear attack. In any event, there are other possible approaches to limiting presidential sole authority in the United States.

While limited, information about launch authority in other nuclear-armed states provides important fodder for discussion as the United States considers how to move forward. Instead of relying solely on the judgment of a single individual to make a decision that could lead to worldwide devastation, most nuclear-armed states have put in place systems that—at least in theory—limit the ability of any one individual to independently order a launch.

Launch Authority in Other Nuclear-Armed Nations

Other than the United States and Russia, the nuclear-armed states do not have early warning systems or launch-on-warning options—meaning they are not under the same intense pressure to respond quickly. In addition, the baseline readiness of nuclear arsenals in these other states is much lower than in the United States and Russia.¹ Therefore, they have been freer to consider a wider range of systems to use in authorizing a nuclear attack, some of which require multiple officials to concur in the decision.

The following is a brief look at how other nuclear-armed states approach this problem, based on the limited amount of available information.

BRITAIN

According to a 2008 BBC report, while the responsibility for ordering a nuclear launch lies with the British prime minister, the United Kingdom has a system in place to ensure that he or she cannot do so without due cause.

Britain's 2015 *National Security Strategy and Strategic Defence and Security Review*, presented to Parliament, states that “only the Prime Minister can authorise the launch of nuclear weapons, which ensures that political control is

¹ There are some indications that China is considering a move to allow it to launch on warning, but this is not currently the case (Kulacki 2016). Doing so would require it to build a system of radars and satellites to detect an incoming attack. As noted on p. 5, India is moving to a higher state of baseline readiness (Blair 2017).

maintained at all times” (HM Government 2015). However, in practice, both the Parliament and the monarch can become involved under certain circumstances.

A 2017 report on nuclear governance in democracies notes that “the possibility of a vote of no confidence (leading to the PM’s immediate resignation) means the prime minister normally seeks parliamentary approval for important security decisions . . .” (Cohen and Mok 2017). And General Lord Guthrie, former chief of the defence staff (the equivalent of the chairman of the joint chiefs of staff in the United States), explained in a 2008 interview by the BBC that, although the prime minister is in practical command of the armed forces under normal circumstances, the formal commander-in-chief is the monarch. So, if the chief of the defence staff believed that an order received from the prime minister was questionable, he or she could appeal to the monarch. He said that, “. . . prime ministers give direction, they tell the chief of the defence staff what they want, but it’s not prime ministers who actually tell a sailor to press a button in the middle of the Atlantic. The armed forces are loyal, and we live in a democracy, but actually their ultimate authority is the Queen” (Knight 2008). In practice, according to Guthrie, “the chief of defence staff, if he really did think the prime minister had gone mad, would make quite sure that the order was not obeyed.”²

CHINA

As with the Chinese nuclear program in general, not much is publicly known about precisely who has the authority to order the launch of Chinese nuclear weapons. Scholars have pieced together the following information, current as of 2013 when Chinese president Xi Jinping took office; Xi has since reformed the military substantially.

Chinese nuclear weapons fall under what used to be called the Second Artillery Corps. In 2015, this unit was renamed the People’s Liberation Army Rocket Forces, and elevated in the command structure to be a fourth branch of the military along with the army, navy, and air force. China has separate command and control systems for conventional and nuclear missiles, and missiles and warheads are stored separately under different commands. The “highest command authority” sends separate commands to each one, but it is not clear to whom this designation refers (Kulacki 2017).

Ultimate authority to order the launch of nuclear weapons is commonly believed to rest with the Standing

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Committee of the Politburo of the Central Committee, but it is “not clear as to whether such an order would be issued directly to missile units or transmitted to them via the chain of command of the Central Military Commission to the Second Artillery, and then in turn to the specific missile brigades . . .” (Shambaugh 2003: 163). Not one, but two orders are believed to be required to authorize a launch: “a launch brigade must receive separate communications from the [Central Military Commission] and [General Staff Division] before a launch is authorized” (Shambaugh 2003: 164).

A 2004 Chinese military text ascribes launch authority to a term that could be translated as “the highest command authority,” which could indicate either the chair of the Central Military Commission or the Central Military Commission itself.³ The chair of the Central Military Commission is the Chinese president; he is also the highest-ranking official in the Chinese Communist Party and the People’s Liberation Army. If the Chinese president is the one with authority to make the launch decision, he would most likely consult with both the Standing Committee of the Political Bureau, which is the highest-level decisionmaking body in the Party, and the rest of the Central Military Commission, which is the highest-level decisionmaking body in the Chinese military (Kulacki 2017).

FRANCE

In France, the president has a high level of control over military and defense policy, and this carries over to the nuclear realm. According to a 1964 decree, “the commander of the Strategic Air Forces is responsible for the operation of [nuclear] forces on the order for engagement given by the

² According to one expert, however, the authorization goes directly from the prime minister through a communications node to the submarine commanders who would execute the orders, leaving little space for the chief of the defence staff to intervene. The minister of defence is not at all in this loop (Blair 2017).

³ The same 2004 text includes two organizational charts detailing the Chinese command and control system, and these show that the command for a nuclear launch would come from a source called the Tongshuaibu (统帅部), also sometimes referred to as “the highest Tongshuaibu” (最高统帅部), which may be neither the Central Military Commission nor the Standing Committee of the Politburo (Kulacki 2017).

President of the Republic,” who is also the chair of the Defense Council and head of the French armed forces (Le Président de la République Française 1964). A 1996 decree reiterates the president’s authority (Le Président de la République Française 1996). Thus, it appears that in France, as in the United States, the president has sole authority to order the launch of nuclear weapons, a situation that has led to France being called a “nuclear monarchy” (Cohen 1986).

According to a 2007 report on the governance of nuclear weapons published by the Geneva Centre for the Democratic Control of Armed Forces, in France “decisions concerning the use of nuclear weapons would generally involve only three people: the president, the chief of the presidential military staff, and the chief of the defence staff” (Born 2007). The chief of the presidential military staff is the private military adviser to the president, and the chief of the defense staff is roughly equivalent to the chairman of the joint chiefs of staff in the United States. However, the role of these other actors is advisory and to authenticate or validate the order; they do not take part in the actual decision to use nuclear weapons.

INDIA

Since it joined the rank of nuclear-armed nations in 1974, India has been establishing its nuclear weapons and command and control systems over time, with the benefit of existing models to draw from, and with an interest in being considered a “responsible” state, even though it is not one of the nuclear weapons states sanctioned by the Nuclear Nonproliferation Treaty. In 2003, India established a Nuclear Command Authority—a two-layered structure to manage its nuclear and missile arsenals. The Nuclear Command Authority includes an Executive Council, which is chaired by the president’s national security adviser, and a Political Council, chaired by the prime minister (Boyd 2003).

The document establishing the Nuclear Command Authority states that the Political Council “is the sole body which can authorize the use of nuclear weapons” (Ahmed 2009). In addition to the prime minister, the Political Council includes the home minister and the ministers of defence, finance, and external affairs. It is not clear how the council makes its decisions. One report in the *Times of India*, making a comparison to the United States’ process, describes it as “more of a collegiate process in India, with the [Nuclear Command Authority’s] political council as a whole playing the role.” The same report says that, despite this, “the final call will rest with [the prime minister]” and “for all practical purposes, the nuclear button will be wielded by [the prime minister]” (Panditi 2014).

In addition, India is streamlining its command and control procedures and moving to a higher level of operational

readiness (Blair 2017). A former senior Indian military official who dealt with nuclear authorization procedures has indicated that Prime Minister Modi now has his own nuclear football and dedicated satellite communication links to expedite use authorization (Blair 2017).

However, an expert on Indian nuclear policy points out that “for all practical purposes, the [prime minister] may not be able to release nuclear weapons without the [national security adviser], who is the interface between the NCA and the [Strategic Forces Command]” (Narang 2017). Therefore, it is possible that the national security adviser could prevent the Indian prime minister from using nuclear weapons, though this would be based not necessarily on legal authority, but rather practical control.

ISRAEL

As with other aspects of the Israeli nuclear weapons program, information on launch authority is scarce. According to a 2007 report, Israeli nuclear weapons are “subject to a system of tight civilian control by a few officials in the executive and under the direct responsibility of the prime minister” (Born 2007). A journalist writing in 1991 reported that “[a]t one stage it was agreed that no nuclear weapon could be armed or fired without authorization from the prime minister, minister of defense, and army chief of staff. The rules of engagement were subsequently modified to include the head of the Israeli air force” (Hersh 1991).

Some form of this system has likely persisted. Avner Cohen, an expert on the history of Israel’s nuclear weapons program, wrote in 2010 that “[w]e must presume that the Israeli command-and-control system has remained faithful to the principle that no single individual, or even organization, would have the final power to activate the system . . .” He also noted that not only the command and control system, but also the organizational chart for Israel’s nuclear bureaucracy is likely shaped by the idea that multiple actors must be

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involved in decisionmaking. If this is true, he says, “the nuclear agency is shared in some fashion by the prime minister, who functions as the ultimate authority, and the minister of defense, who has certain responsibilities for some of the system’s operational aspects and functions” (Cohen 2010).

A more recent report echoed the absence of unilateral power to launch nuclear weapons in Israel. The 2017 report by the British American Security Information Council and the University of Birmingham’s Institute for Conflict, Cooperation, and Security states that “in Israel, leaders are unable to use nuclear weapons unilaterally and are constitutionally forced to deliberate with other senior establishment figures before nuclear use” (Brixey-Williams and Ingram 2017).

NORTH KOREA

North Korea’s nuclear command system—like most things about the country—is essentially a black box, although a recent analysis pointed out that propaganda surrounding its nuclear and missile tests strongly suggests “that Kim Jong Un, and Kim Jong Un alone, can order a nuclear strike” (Narang and Panda 2017). This is consistent with the strongly personalized nature of rule in North Korea, and creates a dangerous situation. A leader with sole authority over the use of nuclear weapons who also strongly fears that the first move in an attack against North Korea could be an attempt at decapitation or denuclearization is under severe pressure to use these weapons or risk losing both his arsenal and his life.

PAKISTAN

The official structure of decisionmaking around nuclear weapons use in Pakistan is described below. It indicates nominal civilian control; however, the military in Pakistan is so powerful that in reality it would probably make the decision about the use of nuclear weapons.

The body with control over the use of nuclear weapons in Pakistan is the National Command Authority, which was established in 2000. Originally chaired by the president, with the prime minister as vice chair, in 2009 the chair passed to the prime minister, a change that was codified into law in the National Command Authority Act of 2010. The National Command Authority is made up of two committees—the Employment Control Committee and the Development Control Committee—each of which includes both civilian and military officials. Other members are the chair of the joint chiefs of staff, the minister of defense, the minister of foreign affairs, the commanders of each branch of the armed services, and the director general of the Strategic Plans Division.

The decision to use Pakistan’s nuclear weapons would require consensus within the National Command Authority,

and the chair of the group (the prime minister) would cast the final vote (Kerr and Nikitin 2016). A 2003 report in the Pakistani *Dawn* newspaper noted that the National Command Authority (chaired at that time by the president) was “authorized to take a ‘unanimous decision’ for using nuclear weapons . . .” The Pakistani prime minister had been told at a special session of the National Command Authority that “the Authority was empowered to take a joint decision to use nuclear weapons and not any individual, including the president” (*Dawn* 2003). In 2008, Khalid Kidwai, head of Pakistan’s Strategic Plans Division, indicated that the decision to use Pakistan’s nuclear weapons would be reached “hopefully by consensus but at least by majority” (Pennington 2008).

RUSSIA

It is unclear whether the Russian system allows the president alone to order a nuclear launch, or whether it requires the involvement of other senior officials. While there is general agreement that Russia has three nuclear footballs (called “Cheget”) and that these are in the hands of the president, defense minister, and chief of the general staff (roughly equivalent to the chairman of the joint chiefs of staff in the United States), it is not known whether all three are required to order a launch.

A leading Russian scholar on strategic weapons and security issues and a former member of the Russian parliament, Alexei Arbatov, has said that there is not enough reliable information to know whether all three briefcases work together or whether any single one could be used to issue a launch order. It is clear to him, however, that the holders of the briefcases do not have equal standing, with the chief of the



Russian President Vladimir Putin with his predecessor, Dmitry Medvedev, at Putin’s 2012 inauguration. During the inauguration, one of the three Russian nuclear footballs (called “Cheget”) was transferred from Medvedev to Putin.

AP Photo/RIA Novosti Kremlin, Yekaterina Shukhina, Presidential Press Service

general staff reporting to the defense minister, and the defense minister reporting to the president (Hoffman 2010).

In 1993, Bruce Blair, now a research scholar at Princeton's Program on Science and Global Security, wrote that "[t]he procedures for authorizing the use of nuclear weapons embodied a core value of Russian political culture, collective centralized decisionmaking. No individual, regardless of rank or position, could alone issue the authorization to employ nuclear weapons." During the time of the Soviet Union, release of nuclear weapons required two stages, a "permission command" and a "direct command." The permission command was "intended to be formed jointly by the USSR president (Mikhail Gorbachev), minister of defense (Dmitriy Yazov), and chief of the general staff (General Mikhail Moiseyev) after conferring with one another either face-to-face or by special telecommunications" (Blair 1993).

Another leading Russian scholar, Pavel Podvig, confirms that the Russian command and control system as set up "enables the military leadership to prevent a situation in which the decision to deliver a first strike is made by the supreme commander alone" (Podvig 2001). The Soviet—and now Russian—system was deliberately designed to "prevent one person from issuing the launch command," with "additional hurdles (i.e., more people involved)" and additional steps required in the case of a first strike (Podvig 2017).

Conclusions

These varied examples of the processes that different nuclear-armed states would undertake to decide to use nuclear weapons—and who would make that decision—illustrate that there are viable alternatives to the US system of sole presidential authority.

A new US decisionmaking system should require the agreement of multiple people to use US nuclear weapons. These decisionmakers could be solely in the administration, although they should not all be people who are appointed by—and can be replaced by—the president (e.g., secretary of defense, secretary of state). They could also include

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congressional leaders, such as the chairs and ranking members of the armed services committees, and foreign relations and foreign affairs committees. As noted above, there is also currently legislation that would limit the president's authority to order the first use of nuclear weapons by requiring Congress to declare war before these weapons can be used.

The current US process is unnecessarily risky given its reliance on the judgment of a single individual. The United States should establish a process that includes multiple decisionmakers to authorize the use of nuclear weapons.

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