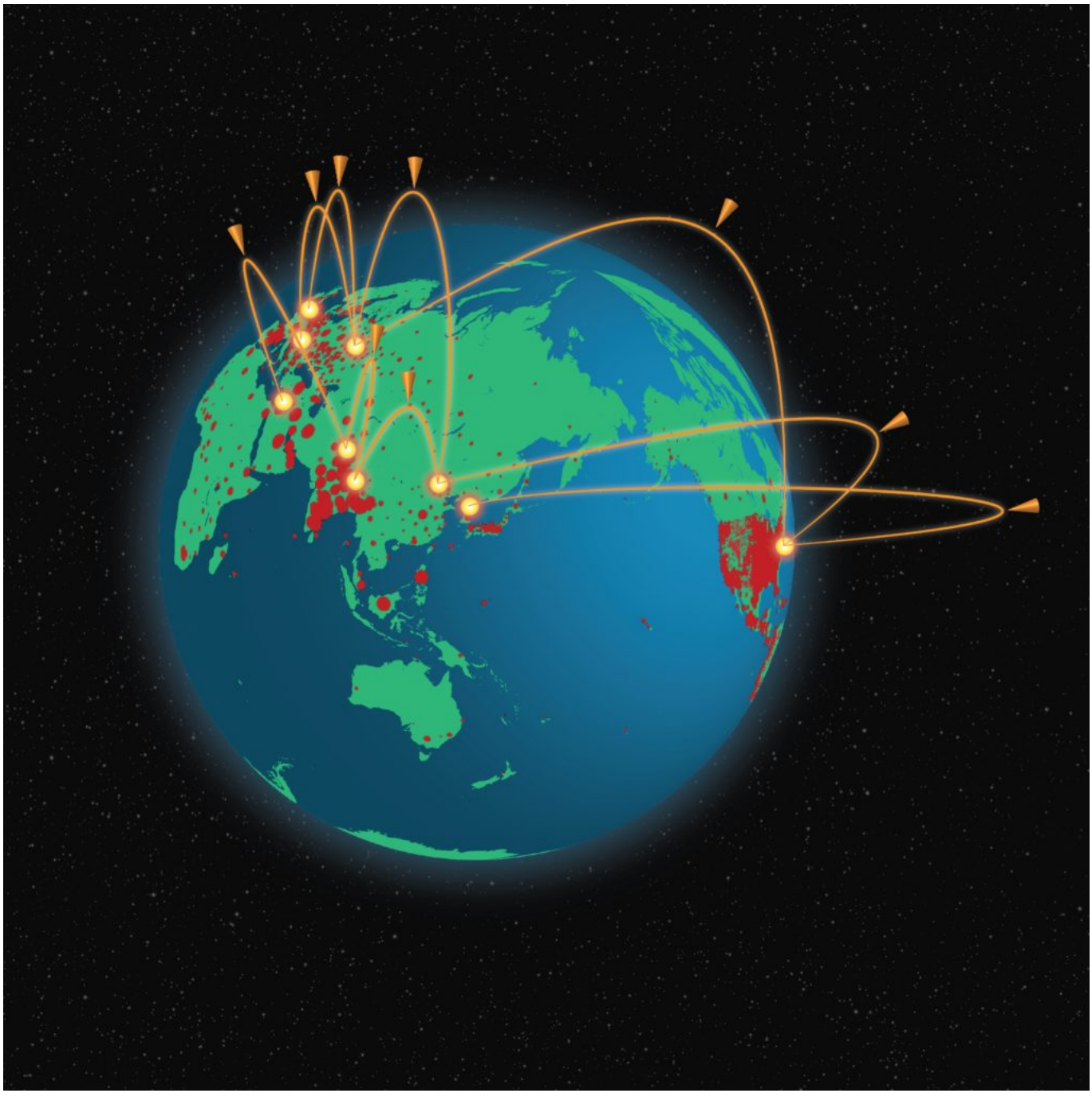
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NUCLEAR HOTLINES: ORIGINS, EVOLUTION, APPLICATIONS



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STEVEN E. MILLER

OCTOBER 29, 2020

I. INTRODUCTION

In this essay, Steven Miller shows how the hotline concept has evolved to a variety of forms and settings, suggesting a broad utility. He argues “it is what might be called a pure or original version of an idea that remains compelling: making sure that the most important, most heavily armed nuclear rivals can communicate directly and effectively at the highest levels in all circumstances, whether crisis or war, in order to minimize escalation, retain control of dangerous situations, and inoculate against potentially disastrous miscommunication or misunderstanding.”

The essay may be downloaded in PDF format **here**

Steven E. Miller is Director of the International Security Program, Editor-in-Chief of the quarterly journal, *International Security* and also co-editor of the International Security Program's book series, Belfer Center Studies in International Security (which is published by the MIT Press).

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Banner image: Sophia Mauro for Nautilus Institute. This graphic shows the pandemic distribution from COVID-19 Dashboard by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University (JHU) on September 25, 2020; and the nuclear threat relationships between nuclear armed states.

II. NAPSNET SPECIAL REPORT BY STEVEN E. MILLER

NUCLEAR HOTLINES: ORIGINS, EVOLUTION, APPLICATIONS

OCTOBER 29, 2020

The searing nuclear near-miss during the Cuban missile crisis of October 1962 elevated concerns about crisis management, particularly as it appeared that some combination of deft handling and dumb luck had narrowly averted a nuclear conflict. After the crisis, chastened leaders on both sides of the Cold War divide were interested in measures that would improve their ability to handle any future crises that might arise by addressing issues that had been revealed by the Cuban crisis. One glaring deficiency exposed by the crisis was the inability of the two governments to communicate effectively in moments of great danger. At key junctures, messages were not timely, and escalatory pressures could not be addressed immediately and explicitly by the two contending powers. Rather, operating through normal, ponderous diplomatic channels, interaction between US President John Kennedy and Soviet Communist Party Chairman Nikita Khrushchev was sluggish, awkward, and sometimes confused, despite the urgency of the moment. As one account put it, "With the two superpowers seemingly on a nuclear collision course, President Kennedy and Chairman Khrushchev were forced to communicate with each other through clumsy diplomatic channels, with messages sometimes being delayed by many hours."[1] Similarly, Richard Smoke writes that the severity of the crisis produced the "jolting" realization that "Normal diplomatic channels were far too slow and formal for the nuclear missile age, and during the crisis Kennedy and Khrushchev had to improvise awkward means for bargaining more freely and frankly."[2] At one point, in a crescendo of tension, Kennedy and his advisers found themselves contending with contradictory letters from Khrushchev and making decisions based on speculations about Moscow's intentions.[3] There may be cases when ambiguity is helpful in defusing a crisis. But when the stakes are enormous, the pressure is intense, and decisions must be made in haste, uncertainty and ambiguity about the motives and behavior of the other side can also be extremely dangerous—a pressure felt acutely by the Kennedy team in October 1962. And when events appear to be slipping out of control, sluggish, unclear, or unreliable communications could have disastrous consequences. It appears that even during an intense confrontation the two antagonists shared the urgent goal of preventing unwanted nuclear escalation, but there was enormous concern on both sides that they would fail to avoid the catastrophic outcome that neither wanted. The inability to communicate effectively magnified escalatory risks and handicapped efforts to manage the crisis safely. Here was a problem to be tackled.

Following the crisis, the problem of creating a direct communication link between Soviet and American leaders was swiftly addressed. The idea of creating such a link was not new, having been raised (unsuccessfully) as early as 1958, but suddenly the proposal was both appealing and feasible—perhaps even urgent—in the aftermath of an experience that brought both leaderships face to face with the prospect of nuclear war. This was a notable change: earlier efforts to negotiate arms control in order to contain nuclear dangers had been discouraging and fruitless, revealing that Moscow and Washington had divergent perceptions of problems and risks, adopted different policy approaches, and sought different objectives.[4] The hotline proved to be the initial exception to the Cold War arms control stalemate. Two months after the Cuban crisis, on December 12, 1962, the United States submitted to the Eighteen-Nation Disarmament Committee a working paper that included a proposal to create a direct emergency communications link between Washington and Moscow to enable exchanges between the heads of state. On April 5, 1963, the Soviet Union announced its immediate acceptance of the proposal.[5] Subsequent discussions led rapidly to the signing of an agreement, the "Memorandum of Understanding Regarding the Establishment of a Direct Communication Link," on June 20, 1963. This was the first bilateral arms control agreement between the United States and the Soviet Union and the first Cold War agreement aimed at addressing nuclear dangers.[6] The initial incarnation of the hotline—a dedicated teletype system that connected Washington and Moscow—went into operation on August 30, 1963.[7] The goal was

to ensure that quick, reliable, secure, accurate, and authoritative interactions were possible between the highest levels of government in the event of an emergency, crisis, or war.

This was seen above all as a measure to reduce the risk of war. Because a nuclear exchange would be so devastating, intentional use of nuclear weapons seemed unlikely. Nuclear war, if it came, was likely to be inadvertent, to result from accident, misperception, miscalculation, misunderstanding, or miscommunication. Clear communication and the ability to consult during emergencies were seen as an antidote to these risks. President Kennedy himself explained this rationale in his memorable speech at American University on June 10, 1963. Speaking shortly before the signing of the hotline agreement, Kennedy remarked that the superpowers shared a "mutually deep interest" in avoiding war and stated that the creation of a direct communications link between Washington and Moscow could help "to avoid on each side the dangerous delays, misunderstandings, and misreadings of the other's actions which might occur at a time of crisis."[8] The December 1962 US working paper that led to the hotline agreement was titled "Reduction of the Risk of War Through Accident, Miscalculation, or Failure of Communication." It noted how easily the behavior of others can be misconstrued, how provocation can be seen where none was intended, how hostile intent can be detected where none existed, how accidents or unauthorized acts can be viewed wrongly as deliberate. It warned that especially in the midst of crisis, "erroneous assessments may dictate a rapid and disproportionate response. As a consequence, sudden and unexplained changes in the military situation may increase the risk of the outbreak of war."[9] Rapid and reliable communication would allow explanation and help avoid or rectify "erroneous assessments."

The frightened policymakers who survived the Cuban scare were primarily preoccupied with improving their ability to control escalation in order to diminish the likelihood that crisis might lead to unwanted war. Strategists, however, identified two other crucial contexts in which the ability to communicate is essential. First, if war did occur, it would be desirable to keep it as limited as possible—but limited war requires mutually understood limits that must somehow be communicated. As Thomas Schelling explained in one of his pioneering essays, "agreement on limits is difficult to reach, not only because of the uncertainties and acute divergence of interests, but because negotiation is severely inhibited both during war and before it begins and because communication becomes difficult between adversaries in time of war." Schelling argues that oblique tacit communication might be possible and sufficient but warns, "There is no assurance that the next war, if it comes, will find mutually observed limits in time and of a sort to afford protection, unless explicit negotiation can take place… Keeping communication channels open seems to be one obvious point."[10] As another prominent study observed that if nuclear weapons are used, preventing escalation to "total war" depends on "the technical capability to communicate with the enemy leadership."[11] The ability to communicate quickly and directly could be decisive in keeping war limited.

Second, in the event of war between the nuclear-armed superpowers, and particularly of inadvertent, unwanted war, it would be an imperative of utmost priority to bring it to an end as quickly as possible—but terminating a war also requires communication. Again, Schelling spells out the logic: "If ever a general war should occur, there is every likelihood that it would be initiated reluctantly or would occur unintended; getting it stopped in a manner consistent with all that is at stake would be of an importance and a difficulty that eclipsed any other problem any modern country has ever faced. Some kind of communication would be at the center of this process."[12] In this conception, the hotline is an essential war-termination device.

In providing a quick, reliable, confidential, and ever-ready communications link between the leaders of the United States and the Soviet Union, the hotline was thus potentially useful in preventing, limiting, and terminating war. In addition, the existence of the hotline was itself regarded as a

confidence-building measure, because "both sides demonstrated to each other and to themselves an appreciation of the importance of prompt and intimate communication between heads of government for the event of an emergency."[13] These were substantial payoffs for a relatively simple and straightforward step. Obviously, it is possible to communicate without a hotline, but in each of these contexts—managing crises, limiting war, or ending war—it seems likely that time will be pressing, and if events are slipping out of control, there will be a powerful need to take action before it is too late. For the decision makers in 1962, the Cuban crisis had provided dramatic examples of the frictions and potentially disastrous complications that can arise when the operational dynamics of military forces and activities come into play, illustrating, in Bruce Blair's vivid phrase, "the extraordinary difficulties involved in maintaining control over the war-waging machinery."[14] The hotline was a mechanism that could allow Soviet and American leaders to work jointly against the escalatory pressures that might grip them both. Moreover, normal communications may be vulnerable to attack or disruption, especially in conflict but even in the midst of crisis. Having secure and preexisting communications arrangements in place makes it more likely that timely interactions can occur under all circumstances. As ever, Schelling says it well: "Facilities for quick communication between heads of government may not exist unless somebody has thought to provide them."[15]

By design, the original Soviet-American hotline was created for the two leaders at the apex of decision making in their countries and was intended not for routine use but for crises and military emergencies. The hotline has accordingly been used sparingly, and public information about its role is uneven and sometimes limited. The available information suggests it has recurrently been utilized in the context of wars involving other parties, in situations in which the interests of Washington and Moscow were in conflict, and especially in which there was some possibility that their capabilities might collide. Better to coordinate than be dragged into war by friends or allies. During the 1967 Arab-Israeli war, for example, there was acute concern, as *Time* magazine put it at the time, about "the overwhelming peril . . . that the U.S. and Russia would now be sucked into a direct confrontation that neither superpower wanted."[16] The United States and the Soviet Union were backing opposite sides in this brief but very intense war, and Moscow's frustration grew rapidly as its allies took a beating and Israel refused all entreaties to cease and desist. Twenty hotline messages were exchanged in the midst of efforts, eventually successful, to arrange a cease-fire. Those messages have been declassified, and despite some evident friction, one can see in them President Lyndon Johnson's attempts to reassure his Soviet counterparts that the United States too sought to restrain the Israelis, end the war, and achieve a cease-fire.[17]

What also comes through, however, is that the hotline is simply a conduit and the messages that flow through it can be calming or inflaming depending on content.[18] Soviet Premier Alexei Kosygin, for example, repeatedly complained about the substantial gap between President Johnson's words and Israeli behavior. "Your information concerning the cessation of military actions in Syria on the part of Israel," Kosygin complained to Johnson on the morning of June 10, 1967, "is not borne out." That the president at times appeared to be either uninformed or dissembling does not seem conducive to building confidence or to effective crisis management. And as Soviet concern about the course of the war peaked, the hotline became a pipeline for the expression of warnings and escalatory pressures. Threatening military action if the war were not "stopped in the next few hours," Kosygin warned that "these actions may bring us into a clash, which will lead to a grave catastrophe."[19] As Robert McNamara commented in his description of these events, "Suddenly Kosygin was calling again on the Hot Line, but this time the message reflected anger and threats. It said, in effect, 'if you want war, you will get war.'" The president, McNamara reported, believed that a "tough stance" was required and responded by ordering the US 6th Fleet to move close to the Syrian coast "to signal our determination."[20] In the end the crisis abated (at least in part because on June 10 the Israelis had completed their capture of the Golan Heights and were prepared to stop military operations), and a

potentially disastrous superpower escalation did not occur, but this was a dangerous situation in which the hotline, at one critical moment, intensified the crisis. Indeed, the hotline can be an instrument for raising the temperature rather than deescalating the crisis. Writing in his memoir about the "urgent crisis" precipitated by the India-Pakistan War of 1971, for example, Henry Kissinger stated without a hint of irony that "we sent a message, drafted by [aide Alexander] Haig and me, on the Hot Line to Moscow to keep up the pressure."[21] Pressuring the other side in the midst of a tense situation is not what the creators of the hotline had in mind.

These illustrations make clear that the hotline is simply another instrument in the hands of states and can be used for whatever purposes the state wishes to pursue. The hotline can be ignored if that fits the perceptions and inclination of decision makers. In the weeks of intensely mounting pressure leading up to the June 1967 Arab-Israeli war, for example, the hotline was unused.[22] Whether to use a hotline can be an unsettled and disputable issue. When North Korea's assertive challenge of maritime boundaries with South Korea provoked a crisis in December 1973, for example, US policymakers debated whether the hotline between Pyongyang and Seoul should be "activated."[23] When decision makers in crisis feel they are being tested and determine that toughness is required, the hotline can convey harsh messages rather than reassuring communications. Thus, President Jimmy Carter claimed to have used the hotline to send the toughest message of his time in the White House in response to the Soviet invasion of Afghanistan.[24] In the hands of a malign and mendacious actor, a hotline could become the purveyor of false information, misleading exchanges, and duplicitous messages. An actor seeking to provoke crisis or conflict, to coerce by threat of escalation, to deceive and surprise rather than clarify and calm, can utilize—or at least, seek to utilize—the hotline for its aggressive purposes.[25] The existence of the hotline is no guarantee that it will be used prudently and responsibly as a crisis-management mechanism.

Nor is it certain that the hotline will always be helpful in defusing a crisis. The speed and clarity offered by the hotline could be undesirable in situations where haste is a danger or ambiguity would be useful in resolving a dispute (for example, by allowing face-saving options for backing down).[26] Use of the hotline can overtake and leave behind other diplomatic interactions and could preempt or disrupt regular flows of intelligence information that could be useful or essential to a full understanding of the situation.[27] Intended for use at the highest levels of government, the US-Russia hotline, by design, short-circuits the normal policy process and can at least temporarily exclude most of the government and the military from information flows. Further, the hotline is designed to be used at moments of extreme tension and distrust, circumstances that can undermine its utility. As one analysis of nuclear risks concludes, hotlines "only work if both sides trust the person on the other end to have an interest in resolving the crisis and take the agreed measures to reduce tensions. . . . A hotline cannot be readily relied upon to resolve communication problems and prevent inadvertent escalation."[28]

Clearly, the hotline is not a panacea and, like any policy instrument, has its limits as well as its advantages. The very existence of the hotline, however, reflects at least an implicit recognition of the profound shared interest in avoiding mutually catastrophic outcomes. It indicates an understanding of the critical importance of communication when dangers are acute. Depending on the situation, the hotline may or may not be useful and may or may not be necessary, but it is a desirable insurance policy, an emergency mechanism that should sit astride the possible paths to nuclear war. And at moments of existential peril, the hotline can serve as an escape valve, an off-ramp from the road to disaster. This still seems like an insurance policy worth having.

In short, clear and timely communication is rightly and understandably regarded as crucial to crisis management, and hotlines can potentially play an indispensable role in helping to defuse crisis and prevent escalation. It is an instrument we should wish to be available to leaders, particularly in

moments of extreme danger. But the impact of hotlines will depend on how they are used, whether to minimize risks and deescalate crises or to promote coercive pressure and play diplomatic games.

Upgrading the Hotline

The hotline has been regarded as of sufficient value that it has remained in place and operational continuously since 1963, through all the vicissitudes of Washington's relations with Moscow, despite the dramatic geopolitical changes across the decades, and despite the changes in information technology and telecommunications that have made it easier to communicate in more routine ways. And the technological basis of the hotline has been modernized as technology has evolved. The original land lines connecting teletype machines in Washington and Moscow have long since been left behind. Three notable upgrades have occurred in the intervening decades.

- On September 30, 1971, a revised hotline agreement was signed. It provided for the use of satellite communications to supplement the link between Washington and Moscow. It was accompanied by a simultaneously negotiated accidents agreement that specified some of the circumstances in which the hotline would be used and called for the hotline to be employed for communicating notifications of military activities (such as missile launches) that might be misunderstood by the other side.[29] The satellite link became operational in January 1978.
- On July 17, 1984, it was agreed to add facsimile technology to the hotline arrangement. This capability was in place by 1986 and supplanted the older teletype system.[30]
- In 2007, a dedicated computer network was created, permitting email communication. This became operational January 1, 2008.[31]

There have been persistent concerns about the difficulty of preserving communications during conflict or crisis, about the vulnerabilities of such systems in wartime, and about the adequacy of the hotline for some of the roles it is intended to perform. In 1983, for example, a Harvard University group warned that the hotline might not survive "any but the most limited nuclear exchange."[32] Similarly, writing in 1991, Desmond Ball observed that the hotline "is not designed to survive or function in a war environment" and offered the disturbing conclusion that "it simply lacks sufficient survivability and endurance to provide connectivity between Moscow and Washington throughout a strategic nuclear exchange."[33] That is, the hotline would fail in exactly the scenarios in which it was most urgently needed. Ball was writing a long time ago but echoes of his analysis are evident three decades later. As one recent analysis puts it, "it is not only possible, but even probable that elements of current NC3 [command, control, and communications] systems will fail under real stress."[34] That dedicated, specialized communications intended for emergency situations are of debatable resilience suggests that normal means of communication will almost surely be more unreliable in the press of crisis or war—no matter how many cell phone numbers are exchanged.[35] In view of such concerns, it seems an obvious conclusion that when possible, the hotline should be modernized, to take advantage of advancing technology, and improved, to increase the likelihood that it is actually available in the dire circumstances when it is most needed.

Spreading Hotlines

The original hotline agreement was a unique bilateral arrangement between the Cold War nuclear superpowers, with their intense rivalry, their vast nuclear arsenals, and their conflicts of interest around the globe. But the idea, once established, was picked up by other states, though often with very different relationships, in different geopolitical settings, and with different nuclear capabilities.[36]

Several of the agreements involve communicating with Moscow:

- The Soviet Union and France, 1966
- The Soviet Union and Britain, 1967
- Russia and China, 1998
- Russia and NATO, December 2003

China has been particularly active in reaching hotline agreements, both with other nuclear-armed states and with other regional actors in Asia:

- US-China nuclear hotline, April 1998[37]
- China-South Korea defense hotline, 2008
- China-India hotline, 2010[38]
- China-Vietnam hotline, 2012
- China-Taiwan hotline, 2015
- China-Japan hotline, 2018[39]

Three hotlines have been established in fraught regional settings:

- India-Pakistan nuclear hotline, 2004[40]
- North Korea-South Korea hotline, earliest incarnation 1971
- Greece-Turkey hotline, 2020[41]

In the relationships between Washington and both Moscow and Beijing, the original hotline agreements have been supplemented with other, more specialized hotline arrangements:

- Additional US-Russia hotlines, 1999[42]
- US-Russia cyberhotline, 2013[43]
- US-Russia Syria deconfliction hotline, 2016[44]
- US-China cyberhotline, 2016[45]

One relatively recent hotline was established to cement a partnership:

- US-India hotline agreement, 2015

Reflecting the origins of the hotline concept as an instrument for reducing the risks of nuclear escalation, most of these hotline arrangements involve nuclear dyads, and all, with the exception of Greece and Turkey, include at least one nuclear-armed state.

Varieties of Hotline: Different Levels, Different Purposes

The original Soviet-American hotline was established by the nuclear superpowers to facilitate communication between heads of state in the midst of serious crises in order to minimize the likelihood of nuclear escalation. It was thus very focused and infrequently utilized. Subsequent hotline arrangements display considerable variety in their participants and purposes. Some are aimed at connecting foreign ministries or other officials rather than heads of state. Some involve

direct communication between militaries. China and South Korea, for example, have connected their defense chiefs and their navies and air forces. In the case of NATO and Russia, the link connects an international organization with a state and is intended to facilitate direct interaction between the NATO secretary general and the Russian minister of defense.[46] Some are multilayered: the India-Pakistan arrangement includes both a line between the foreign ministries and a link between their respective directors of military operations. Some arrangements evolve to include multiple links. In 1999, for example, the United States and Russia augmented the original hotline by signing a memorandum that established "communication lines" between the chairman of the Russian government and the US vice president and between the secretary of the Russian Security Council and the American national security adviser.[47] In one idiosyncratic case, China-Taiwan, a hotline agreement connects their respective ministers of Cross-Strait affairs. Some have rarely ever been used, whereas the North Korea-South Korea hotline (when not interrupted in periods of tension) is used for daily communication and a variety of routine purposes, in addition to facilitating political dialogue and negotiation between the parties, and the US-Russia Syria deconfliction hotline appears to be regularly employed in the context of recurrent military operations.

Where the original US-Russia hotline was conceived as a crisis-management mechanism and intended to be used by heads of state in situations of extreme danger, many of these additional hotline arrangements fall into the crisis-prevention category, aiming to contain incidents at lower levels and prevent escalation to the highest authorities of the state. This is obviously true, for example, of direct communications links between militaries that are meant to keep frictions or mishaps localized and dealt with by the militaries themselves, avoiding the need to draw in officials at higher levels. Hotlines can also allow clarification and explanation at levels below the head of state, possibly preventing the kinds of misunderstanding, misperception, or miscommunication that could result in a more urgent crisis. Multiple avenues of communication can allow potentially dangerous developments to be tackled at lower levels and with less risk; not every context is suitable for the head-of-state level. The crisis-prevention rationale for the proliferation of hotlines is worthwhile: the best way to minimize the risks of nuclear crises is to prevent them. But these enlargements of the hotline concept should be viewed as supplements to the crisis-management purpose, and they do not obviate the need for urgent communication if an existential emergency nevertheless arises.

The US-India hotline represents an interesting innovation because it involves two states that have cordial relations and no real history of military conflict between them.[48] Established during President Barack Obama's visit to India in January 2015, it was intended to reinforce the positive relationship between these two large powers—the only hotline created during Obama's presidency, as Indian commentators pointed out, seeing it as an expression of "deepening" US-India relations.[49] As Obama's adviser for South Asian affairs, Peter Lavoy, commented, "Hotline has connotation of some crisis management phone or system that was used during the Cold War to defuse crisis. That's not what we have. This is a secure line between two very close partners so that they can exchange views at the heads of state level, exchange views and coordinate approaches to solving real problems."[50] Viewed in this way, the US-India hotline represents a stretching of the original hotline concept to serve a different purpose. But there is a sense in which the US-India arrangement has relevance to crisis management and is consistent with the fundamental logic underlying hotlines: the containment of nuclear danger. It introduces, in effect, a new model, involving not two rivals who in a crisis with one another might need to exchange messages or information but rather the United States as a third party in the rivalry of two other states. The friction, obviously, is between India and Pakistan—both nuclear armed and in the habit of engaging in recurrent alarming crises—but the United States (in part because it is the global superpower) tends to get drawn into these crises, serving as a sort of referee but also seeking to prevent dangerous escalation that would be contrary to its interests. During the Kargil War in spring 1999,

for example, the Clinton administration engaged in what has been described as “frantic diplomatic intervention by the United States in an effort to de-escalate the conflict.”[51] Similarly, in the war scare of early 2002, triggered by a terrorist attack on the Indian Parliament and involving the largest military mobilization in India’s history, the United States played a central role in defusing the crisis. The momentum toward war was considerable, the possibility that nuclear weapons would be used seemed all too real, and Washington was sufficiently alarmed that President George W. Bush personally appealed to India and Pakistan to step back from the brink.[52] Islamabad and New Delhi seemed trapped in an escalatory spiral, and American diplomats felt that the antagonists “needed the United States to provide a way out.”[53] In such circumstances, it is not hard to imagine that a hotline could be a useful instrument, facilitating a mediating role and bringing Washington closer to dangerous and fast-moving situations. This makes the US-India arrangement seem like a worthwhile extension of the hotline concept, and in South Asia the value would probably be greater if there were also a US-Pakistan hotline.

Hotlines have spread geographically and through different layers of government, have evolved to cover different scenarios, and have spilled beyond the domain of nuclear-crisis management to touch other areas of international relations. As Claudia Aradau has observed, “the hotline is now the indispensable indicator of international crisis, from HIV/AIDS to human trafficking, from natural disasters to climate change.”[54] Reliable, durable, timely communications are recognized as essential to effective performance in realms far afield from nuclear crises, such as Arctic search and rescue and emergency management.[55] The hotline concept is clearly flexible and adaptable, but in no realm can the consequences of inadequate communications be more disastrous than in nuclear crises or nuclear war.

Beyond the Hotline

The core insight undergirding the establishment of the hotline is that dangerous crises might be contained and abated by clarity in communication that provides accurate mutual understanding and that dampens reciprocal fears that might spiral out of control. The hotline provided a mechanism for facilitating such communication in an urgent crisis. But it was also viewed as one of a family of crisis-management measures based on the same principle. As William Ury prominently urged, it was desirable to go “beyond the hotline.”[56] One idea, offered by Ury and others, was to supplement the hotline, which though valuable was simply a direct communications link, with an institution devoted to preventing nuclear war; writing in 1985, Ury proposed the creation of a joint crisis-control center. This idea, with multiple champions, led to the establishment in 1987 of the US-Soviet Nuclear Risk Reduction Centers (NRRCs). The intent, as Barry Blechman and Michael Krepon explained at the time, was to meet the “mutual need to create a separate channel of communication and autonomous institutional arrangements dedicated to reducing the risk of nuclear war.”[57] This would create offices and staffs in Moscow and Washington that communicated regularly, monitored developments continuously (around the clock, 365 days per year), shared information routinely, created connections that allowed crisis interaction below the level of heads of state, and that enabled “instantaneous communication” between experts whenever necessary. As it evolved, the NRRCs also became the conduit for all notifications and exchanges of information required by various arms control agreements. The NRRCs are, in effect, an elaboration on the hotline concept, a variation aimed at creating an institution rather than a mechanism and at working levels of the bureaucracy rather than heads of state, but with the same underlying logic of buttressing communication for the purpose of minimizing misunderstandings and miscommunications that might lead to nuclear escalation. Similarly, other arrangements sought to enhance communication at the level of military operations in order to contain the implications of incidents, whether intentional or accidental, that might arise when military forces are operating in proximity to one another. This was, for example, one of the purposes of the US-Soviet Incidents at Sea Agreement; better to have tactical mishaps or

confrontations sorted out between the navies than to risk that they might escalate into a dangerous crisis.[58]

Assessing the scene in 1984, Thomas Schelling was disappointed that more was not done to build upon the hotline. “There were some of us,” he wrote, “who thought there were many preparatory steps to be taken bilaterally or multilaterally and that the hotline was a first step. While the hotline did not turn out to be a last step, it certainly did not initiate a proliferation of preparatory measures for calming crises through exchange of reassuring information or through enhanced facilities for impromptu summit negotiations.”[59] As the examples of the Nuclear Risk Reduction Centers and the Incidents at Sea Agreement attest, some enlargements of the hotline idea have been made. But Schelling’s challenge, though dated, raises the still-pertinent question of whether existing measures are adequate to the task, whether they are sufficiently effective and robust to provide a meaningful buffer against disaster in crisis. “Enhanced nuclear risk reduction,” urged a group of prominent experts in 2017, “also requires increasing the means to communicate in a crisis.”[60] As nuclear fears declined in the post-Cold War era, these issues declined in priority. But their relevance and importance may be restored in an era of increasingly toxic great power relations and waning arms control.

Conclusion

The hotline concept has evolved to a variety of forms and settings, suggesting a broad utility. But it is what might be called a pure or original version of an idea that remains compelling: making sure that the most important, most heavily armed nuclear rivals can communicate directly and effectively at the highest levels in all circumstances, whether crisis or war, in order to minimize escalation, retain control of dangerous situations, and inoculate against potentially disastrous miscommunication or misunderstanding. Once upon a time, this set of issues was a core strategic concern and figured prominently in strategic discussions and nuclear policy. Preventing nuclear war, stabilizing the nuclear balance, and circumscribing the risks of nuclear crises were the heart of the matter in early discussions of arms control and nuclear policy.[61] No matter how far we get in time from Hiroshima and Nagasaki, no matter how complacent the public discourse has become about nuclear dangers, no matter how much military policy reflects different preferences and priorities, these issues retain both their relevance and their importance. If the urgent, desperate moment ever arrives, in acute crisis and even more in war, we will be very glad to have made preparations that improve the likelihood that we will survive it. As Desmond Ball concluded in his detailed analysis of the hotline, “There is simply no excuse for not proceeding to develop and deploy an improved hotline. The costs are virtually insignificant; its utility in the event of a nuclear exchange is incalculable.”[62] Indeed, the father of this idea and its most persistent and outspoken advocate, Thomas Schelling, argues that it may be the most important step we can take. He concludes his discussion of the hotline in *Arms and Influence* with this arresting sentence: “There is probably no single measure more critical to the process of arms control than assuring that if war should break out the adversaries are not precluded from communication with each other.”[63]

III. ENDNOTES

[1] Richard Hudson, “One Crisis Alone Justified the Hot Line,” *New York Times*, August 26, 1973.

[2] Richard Smoke, *National Security and the Nuclear Dilemma: An Introduction to the American Experience* (New York: Random House, 1984), 138.

[3] Famously recounted in Robert F. Kennedy, *Thirteen Days: A Memoir of the Cuban Missile Crisis*

(New York: W. W. Norton, 1969).

[4] One important antecedent, the 1958 Surprise Attack conference, for example, was an exercise in "futility and frustration," despite the crucial importance of the issue. See Jeremi Suri, "America's Search for a Technological Solution to the Arms Race: The Surprise Attack Conference of 1958 and a Challenge for Eisenhower Revisionists," *Diplomatic History* 21, no. 3 (Summer 1997): 447.

[5] This Soviet move was unexpected in Washington and was attributed to the impact of the Cuban missile crisis. The story is recounted in Mason Willrich, *Adventures between History's Pages: A Memoir* (Chicago: Ampersand, 2007), 152-153. As an official at the US Arms Control and Disarmament Agency, Willrich drafted the instructions to the US delegation in Geneva that negotiated the issue with the Soviets.

[6] The hotline agreement was preceded by the Antarctic Treaty, a multilateral agreement which entered force in June 1961. The Antarctic Treaty demilitarized and prohibited nuclear detonations in Antarctica, but its animating purpose was to facilitate scientific exploration.

[7] Brief accounts of this history can be found in Haradur Egilsson, "The Origins, Use, and Development of Hot Line Diplomacy," Clingendael Discussion Papers in Diplomacy, Netherlands Institute of International Relations, March 15, 2006, 1-4; and Coit D. Blacker and Gloria Duffy, eds., *International Arms Control: Issues and Agreements* (Stanford, CA: Stanford University Press, 1984), 117-119.

[8] President John F. Kennedy, "Commencement Address at American University," June 10, 1963, https://www.jfklibrary.org/archives/other-resources/john-f-kennedy-speeches/american-university-19630610.

[9] The document in its entirety can be found in the *Congressional Record—Senate*, June 28, 1963, 12012-12015.

[10] Thomas C. Schelling, "Bargaining, Communication, and Limited War," *Conflict Resolution* 1, no. 1 (March 1957): 20, 34.

[11] Albert Carnesale, Paul Doty, Stanley Hoffman, Samuel P. Huntington, Joseph S. Nye, Jr., and Scott D. Sagan, *Living With Nuclear Weapons* (New York: Bantam Books, 1983), 149.

[12] Thomas C. Schelling, *Arms and Influence* (New Haven: Yale University Press, 1966), 263-264.

[13] Thomas C. Schelling, "Confidence in Crisis," *International Security* 8, no. 4 (Spring 1984): 58.

[14] Bruce G. Blair, "Arms Control and Arms Management," in *Approaches to East-West Arms Control*, ed. William Kincade, Nancy Yinger, and Gloria Duffy (Washington DC: Arms Control Association, 1979), 25.

[15] Schelling, *Arms and Influence*, 260.

[16] "Foreign Relations: Hot Line Diplomacy," *Time*, June 16, 1967.

[17] The documents, including translations from Russian, are available at http://www.thelibertyincident.com/docs/hotline.pdf.

[18] Schelling discusses possible "misuses" of the hotline in "Confidence in Crisis," 63-65.

[19] These passages are from Kosygin's hotline communication that was delivered to President Johnson at 9:05 AM on June 10, 1967. See "Message from Premier Kosygin to President Johnson," June 10, 1967, Document 243 in *Foreign Relations of the United States, 1964-1968*, vol. 19, Arab-Israeli Crisis and War, 1967.

[20] Robert S. McNamara, *Blundering into Disaster: Surviving the First Century of the Nuclear Age* (New York: Pantheon Books, 1986), 13.

[21] Henry Kissinger, *White House Years* (Boston: Little, Brown, 1979), 910. Interestingly, the hotline message in 1971, like the harsh Kosygin message in 1967, comes across as a mix of threat and ultimatum. President Richard Nixon wrote, "I cannot emphasize too strongly that time is of the essence to avoid consequences neither of us want." Ibid., 911.

[22] A point noted in Eszter Simon and Agnes Simon, "The Soviet Use of the Moscow-Washington Hotline in the Six-Day War," *Journal of Transatlantic Studies* 15, no. 3 (2017): 289. They see this as a sign that Moscow was not interested in calming the crisis and preventing the war.

[23] See "Minutes of Washington Special Actions Group Meeting," December 4, 1973, Document 247 in *Foreign Relations of the United States, 1969–1976*, vol. E-12, Documents on East and Southeast Asia, 1973–1976. After "lengthy discussion," the group recommended that the hotline be "opened."

[24] Leonid Ryabikhin, "Moscow-Washington Hotline: Set-Up, Development, and Usage," paper prepared for the Workshop on "Nuclear Hotlines: Practice and Comtemporary Considerations," August 11, 2020.

[25] Such concerns have been raised, for example, in the US-China context. See, for example, Ben Wolfgang, "Crisis Hotline Between US, China Feared as Strategic Tool for Attack," *Washington Times*, August 4, 2020. In this article, Brookings expert Michael O'Hanlon warns "hotlines can just be vehicles for propaganda and deception, and do nothing to resolve a crisis. They could even contribute to intensifying it."

[26] Schelling warns about what he calls "the mischievous influence of haste." *Arms and Influence*, 227-234.

[27] Simon and Simon note, for example, that in the 1967 crisis, a key meeting between diplomatic officials was not taken into account at the highest levels because regular diplomacy moved too slowly when the Hotline was dominating. They conclude from this incident, "The speed of the Hotline deprives decision-makers of information collected through slower channels." "Soviet Use," 297.

[28] Patricia Lewis, Heather Williams, Benoit Pelopidas, and Sasan Aghlani, *Too Close for Comfort: Case of Near Nuclear Use and Options for Policy*, Chatham House report (April 2014): 25.

[29] For a full account of these negotiations, see Gerard Smith, *Doubletalk: The Story of SALT I* (New York: Doubleday, 1980), 280-298.

[30] This upgrade is described in Stephen L. Thacher, "Crisis Communications Between Superpowers," US Army War College, February 12, 1990.

[31] For a description of the technological evolution of the hotline, culminating in the email capability, see "The Washington-Moscow Hotline," Electrospaces.net, October 28, 2012.

[32] Carnesale et al., *Living With Nuclear Weapons*, 149.

[33] Desmond Ball, “Improving Communication Links between Moscow and Washington,” *Journal of Peace Research* 28, no. 2 (May 1991): 142, 154.

[34] *Last Chance: Communicating at the Nuclear Brink*, Scenarios and Solutions Workshop synthesis report, Nautilus Institute, Stanley Center for Peace and Security, and Technology for Global Security, May 14, 2020, 4.

[35] The allusion is to the exchange of cell phone numbers between President Trump and North Korean leader Kim. Explained Trump: “I can now call him. I can now say, ‘well, we have a problem.’ I gave him a very direct number. He can now call me if he has any difficulties, I can call him.” This can perhaps be described as a private hotline, but with none of the protections and special arrangements associated with a formal hotline, and unlikely to be reliable in the press of crisis or war. Trump quoted in “Call Me Any Time: Trump Says He Gave North Korea’s Kim Direct Number,” Reuters, June 15, 2018.

[36] I am relying here on the useful survey “Hotline Agreements,” Arms Control Association, May 2020.

[37] Oddly, it took nearly three decades to put the US-China hotline in place. The idea of such a hotline was included in preparations in spring 1971for the Nixon-Kissinger breakthrough with China later that year (after Kissinger’s secret visit to Beijing in July 1971). See “China and Arms Control,” Document 109, Memorandum from John H. Holdridge of the National Security Council Staff to the President’s Assistant for National Security Affairs (Kissinger), March 18, 1971, in *Foreign Relations of the United States, 1969–1976*, vol. 17, *China, 1969–1972*, ed. Steven E. Phillips (Washington, DC: Government Printing Office, 2006). The analysis urged that the United States propose to China the creation of a hotline and argued, “The advantage of a hot line would be its use during a crisis. The Chinese could easily accept this proposal without encumbering it with extraneous political conditions.” (276)

[38] It was reported in 2010 that India and China had agreed to set up a hotline, but disagreements about the details prevented implementation, and this arrangement appears to still be pending. See, for example, “India Wants Equal Status on Hotline,” *India Today*, May 19, 2018.

[39] This step was prompted in part by maritime frictions associated with the Sino-Japanese dispute over islets in the East China Sea. The agreement involved setting up a “security hotline” between “senior defense officials” in order to “defuse any maritime confrontations” that might arise. See “Japan and China Agree on Security Hotline after a Decade of Talks,” Reuters, May 9, 2018; and Robin Harding and Emily Feng, “China and Japan Open Hotline to Prevent Military Clash,” *Financial Times*, June 8, 2018.

[40] However, the existing India-Pakistan hotline (which connects foreign ministers) has been described as moribund. There have been calls for a hotline to link Indian and Pakistani military authorities. See Harry I. Hannah, “A Hotline between National and Nuclear Command Authorities to Manage Tensions,” Stimson Center, August 8, 2018, https://www.stimson.org/2018/hotline-betwee--national-and-nuclear-command-authorities-manage-tensions/.

[41] In the midst of mounting tensions in the eastern Mediterranean, Greece and Turkey agreed to set up what has been described as a “military de-confliction mechanism.” See Robin Emmott, “Greece, Turkey Set Up Hotline to Avoid Clashes in Eastern Mediterranean, NATO Says,” Reuters, October 1, 2020.

[42] This agreement established communications between national security advisers and also

between the US vice president and the chairman of the Russian Federation. Federation of American Scientists, Press release, October 15, 1999, https://fas.org/nuke/control/hotline/news/991015-ru--hotline.htm.

[43] Ellen Nakashima, "US and Russia Sign Pact to Create Communication Link on Cyber Security," *Washington Post*, June 17, 2013. For the official announcement, see White House, Office of the Press Secretary, "US-Russian Cooperation on Information and Communications Technology Security," June 17, 2013. For a fuller discussion, see Erin Banco and Kevin Poulsen, "This Hotline Could Keep the US and Russia from Cyberwar," *Daily Beast*, March 7, 2019.

[44] See, for example, Eric Schmitt, "A Hotline for Americans and Russians to Avoid Catastrophe in Syrian Skies," *New York Times*, December 14, 2016. According to press reports, the hotline connecting US and Russian air operations centers managing missions over Syria was in use as much as ten or twelve times per day. See Phil Stewart, "As Syria War Tightens, US and Russia Military Hotlines Humming," Reuters, August 23, 2017.

[45] See US Department of Justice, Office of Public Affairs, "Second US-China Cybercrime and Related Issues High Level Joint Dialogue," June 14, 2016, https://www.justice.gov/opa/pr/second-u--china-cybercrime-and-related-issues-high-level-joint-dialogue, which notes that among the results of a dialogue on cyberissues was agreement to create by September 2016 a "US-China Cybercrime and Related Issues Hotline Mechanism."

[46] See "First Call on NATO-Russia Hotline," North Atlantic Treaty Organization, January 12, 2004.

[47] Federation of American Scientists, Press release, October 15, 1999, https://fas.org/nuke/control/hotline/news/991015-rus-hotline.htm.

[48] A "friendly hotline" may not be unprecedented. There is brief reference in the *Foreign Relations of the United States* series to President Nixon "inaugurating" a US-Japan hotline in May 1972. See *Foreign Relations of the United States, 1969–1976*, vol. 19, pt. 2, *Japan, 1969–1972*, ed. David P. Nickles (Washington, DC: Government Printing Office, 2018), doc. 118. However, I have found no subsequent reference to this link, and it is not included in surveys of active hotlines.

[49] See, for example, "Indo-US Relations: Hotline between PMO and White House to Continue Post January 20," *Indian Express*, January 10, 2017.

[50] "Modi-Obama Hotline Becomes Operational, *Times of India*, August 21, 2015.

[51] Mark S. Bell and Julia Macdonald, "How Dangerous was Kargil? Nuclear Crises in Comparative Perspective," *Washington Quarterly* 42, no. 2 (2019): 135. For a discussion of the recurrent crises between India and Pakistan and the challenge of resolving them without nuclear escalation, see Karthika Sasikumar, "India-Pakistan Crises under the Nuclear Shadow: The Role of Reassurance," *Journal for Peace and Nuclear Disarmament* 2, no. 1 (2019): 151-169.

[52] See, for example, "Bush Steps into South Asian Conflict," CNN.com, June 6, 2002; and Barry Bearak, "Indian Leader's Threat of War Rattles Pakistan and the US," *New York Times*, May 23, 2002.

[53] Steven Coll, "The Stand-Off," *New Yorker*, February 13, 2006 (which provides a reconstruction of the crisis and illuminates the American role in easing it).

[54] Claudia Aradau, "Hotlines and International Crisis," in *Making Things International: Catalysts and Reactions*, ed. Mark B. Salter (Minneapolis: University of Minnesota Press, 2016), 216.

[55] See, for example, Emmi Ikonen, *Arctic Search and Rescue Capabilities Survey: Enhancing International Cooperation*, Finnish Border Guard, August 2017, especially 37-39; and Jyh-Shyan Huang and Yao-Nan Lien, "Challenges of Emergency Communication for Disaster Response," *Proceedings of the 2012 IEEE ICCS*, 528-532. Thanks to Peter Hayes for sharing these materials.

[56] William Ury, *Beyond the Hotline: How Crisis Control Can Prevent Nuclear War* (Boston: Houghton Mifflin, 1985).

[57] Barry Blechman and Michael Krepon, *Nuclear Risk Reduction Centers* (Washington DC: Georgetown Center for Strategic and International Studies, 1986), 6.

[58] See Sean M. Lynn-Jones, "A Quiet Success for Arms Control: Preventing Incidents at Sea," *International Security* 9, no. 4 (Spring 1985): 174-175.

[59] Schelling, "Confidence in Crisis," 59.

[60] Nuclear Crisis Group, "Urgent Steps to De-escalate Nuclear Flashpoints," Global Zero, June 2017, 4. Wilfred Wan also identifies hotlines as a nuclear-risk-reduction measure in *Nuclear Risk Reduction: A Framework for Analysis*, United Nations Institute for Disarmament Research, 2019, 25.

[61] Schelling's famous fulmination against "mindless" arms control was inspired by his belief that policy had diverged from these purposes. See Thomas C. Schelling, "What Went Wrong with Arms Control?," *Foreign Affairs* 64, no. 2 (Winter 1985): 226.

[62] Ball, "Improving Communication Links," 155.

[63] Schelling, *Arms and Influence*, 263-264.

IV. NAUTILUS INVITES YOUR RESPONSE

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Nautilus Institute
608 San Miguel Ave., Berkeley, CA 94707-1535 | Phone: (510) 423-0372 | Email: nautilus@nautilus.org