

**THE ATLANTIC COUNCIL**  
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**Shaping the Nuclear Future:  
Toward a More  
Comprehensive Approach**

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OCCASIONAL PAPER

Andrew J. Goodpaster

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# **Shaping the Nuclear Future: Toward a More Comprehensive Approach**

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DECEMBER 1997  
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## FOREWORD

This is the third and latest paper in a series by General Andrew J. Goodpaster, USA (ret.) that includes *Tighter Limits on Nuclear Arms: Issues and Opportunities for a New Era* (1992) and *Further Reins on Nuclear Arms: Next Steps for the Major Powers* (1993). These pathbreaking reports set out a vision for deep reductions in nuclear weapons following the end of the Cold War. Despite some initial skepticism, the ideas have become accepted wisdom. If General Goodpaster's 1992 paper described the "what" and his 1993 paper explained the "why," this latest report takes a first step toward prescribing the "how" of undertaking a plan for the stable and secure reductions of our nuclear weapons stockpiles.

Readers of this paper will appreciate the need for continued coordination among the major nuclear powers, especially Russia and the United States, and, just as critically, an active engagement of the smaller powers as well as the undeclared nuclear states. And even more important is the pressing need for sustained leadership on this issue, now at the top of the U.S. national security priority list in spite of the low-profile it has been afforded in recent years. Only under these circumstances can we and our allies move from an outdated deterrence posture to a more stable relationship characterized by what General Goodpaster terms "reassurance."

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**David C. Acheson**

*President*

*The Atlantic Council of the United States*



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# Shaping the Nuclear Future: Toward a More Comprehensive Approach

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## SUMMARY

The transformation set in motion by the end of the Cold War calls for changes in the role of nuclear weapons and in the balance between the purposes they serve and the risks they embody. But these changes are likely to be piecemeal and halting so long as nuclear forces are conceived of primarily in terms of the old framework of deterrence.

A new, more comprehensive approach to nuclear weapons is needed along with a new strategic concept— *reassurance*— to guide policy and decisions on force posture. Reassurance is part of the transformation of adversarial Cold War relations to more cooperative, peaceful relationships on a global basis. It involves positive measures necessary to reassure all parties that nuclear weapons will *not* be used— rather than posing the threat of enormous immediate destruction that only nuclear weapons in large numbers and on a high state of readiness can inflict. Reassurance means building consensus among the nuclear weapons powers and the non-nuclear states regarding the much reduced role of nuclear weapons in security plans and policies.

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## THE SETTING

With the end of the Cold War, the risk of war between the major powers is low and much has been done already that reduces the danger of nuclear weapons. Such measures include the indefinite extension of the Non-Proliferation Treaty, the cessation of nuclear testing, the initiation of verification procedures, the working out of START I and START II, and the preliminary discussions of START III. Much more surely lies ahead. Among the most important of such possibilities are: further step-by-step reductions in total weapons numbers; modified alert practices, lowering the risks they involve; added safeguards covering weapons and weapons-grade materials; strengthened verification measures; and steps to assure weapons safety and reliability in the absence of testing.

A new comprehensive approach is necessary to better shape an overall security environment in which the role of nuclear weapons is sharply diminished. It should be guided by a clear set of objectives and a coherent concept of strategic policy, and should extend to the whole nuclear weapons complex, wherein objectives and concepts must be translated into actions. The main objective should be "the fewest nuclear weapons in the fewest hands," in the words of former Secretary of Defense William J. Perry. This new approach implies many new departures from past practice, responding to new security needs and opportunities, requiring careful assessment and sustained effort. Along the way it will encounter many organizational vested and special interests resistant to the needed changes. Well-informed and inspired leadership, both in the United States and abroad, will be required to overcome the many obstacles.

## NATIONAL SECURITY INTERESTS

A clear understanding is needed as to which of our national security interests are of greatest importance. This is the point of departure for the new comprehensive approach to nuclear weapons policy and force posture. Without question, the highest guiding interest must be to reduce, to the practical minimum, the dangers to the United States posed both by the existence and the potential development of nuclear weapons around the world.

We must understand foreign interests, their operational concepts and the nuclear weapons capabilities that could be used against us. Attack by these weapons in large numbers must be prevented as a truly *vital* interest. It threatens the very existence of the United States. We must also recognize the damage that even a single weapon could inflict; we need only think of the results of the terrorist attack— with conventional explosives— on the World Trade Center in New York.

It is in our highest priority interest to prevent the occurrence of any nuclear disaster, of whatever size, whether by deliberate attack on us or our allies, by miscalculation, by reciprocal escalation getting beyond control, by accident or by action of terrorists, state-sponsored or transnational. We must be ready to subordinate other, less important interests to the overall nuclear challenge.

While recognizing that many other U.S. security interests and concerns must be taken into account, there is compelling reason for giving clear priority in the United States to limiting the role of nuclear weapons. This policy will require taking one step back from deterrence as we have practiced it and creating the necessary *reassurance* that national security objectives can be attained without relying on nuclear weapons.

## TRANSFORMING DETERRENCE

During the Cold War the threat of massive, immediate destruction helped deter war among the major powers. But the Cold War is now over and the central problem is securing a lasting, stable peace. In similar circumstances after World War II, efforts to incorporate Germany and Japan into the Western security community proved far more successful than the approach taken after World War I which sought instead to weaken the defeated powers. A lesson we can draw from these experiences is the importance of drawing Russia more closely into Western institutions. As part of such an approach, nuclear weapons policies and force postures need to reflect the transformation in the overall security relationship from adversarial to cooperative. Such a transformation is now within our grasp.

For today and the foreseeable future, a strategic policy including deterrence is still necessary for preventing the use or threat of nuclear weapons against us. But this should be a new type of deterrence, quite different from that of the past. In place of assured nuclear destruction, the new deterrence aims at providing *reassurance* in a much more benign security environment than we previously have known— one that is far less demanding and more cooperative rather than adversarial. While classic deterrence relied on an active threat: if x attacks y, y will respond, this post-Cold War doctrine is the reverse: if x does *not* attack or threaten y, x can feel reassured with a reasonable degree of confidence that y will reciprocate. This is a fundamental shift in emphasis: classic deterrence relied on overwhelming threat of inflicting unacceptable damage and a hair trigger response; the post-Cold War doctrine instead puts its emphasis on actions necessary to reassure others so that no such attack is likely and to reassure ourselves that we can deal with various kinds of attacks should they nevertheless occur. Reassurance seeks to shape a more positive and stable security environment. A key part of this involves working towards "the fewest weapons in the fewest hands" while maintaining a secure retaliatory capability. While potential enemies obviously still will

be deterred by the certainty that we would respond to any nuclear attack with as much or probably much greater force than that used against us, there is no need for an overtly hostile force posture for this purpose. We can and should continue to shift to a peacefully restrained security understanding and relationship.

If it were possible to eliminate all of the world's nuclear weapons with certainty, such could well be our goal. But so long as the possibility of clandestine possession or undetected preparations for breakout continues to exist, or a turn for the worse in the international security environment remains a possibility that must be safeguarded against, even the more benign approach of reassurance does not permit full elimination. Verification capabilities do *not yet* provide the required level of certainty. On the other hand, elimination of *most* weapons, down to a level of a few hundred or less for each nuclear power, seems to be a high priority security goal and is consistent with the reassurance objective.

Unquestionably, our interest in protection against nuclear attack or nuclear disaster is shared by every other nation— even by the possible proliferators such as Iraq, if they think carefully about their national safety and well-being. But we have to recognize that other nuclear weapons nations also regard such weapons as the ultimate guarantee of their security in an uncertain, turbulent world. The prospects for reducing nuclear weapons inventories, therefore, are highly dependent upon the sense of security of these states that already have such weapons, or may be considering their acquisition.

And further purposes for their nuclear capabilities are seen in some of the nuclear weapons states. Some in Britain and France, for example, believe these weapons add to the international status and prestige of their countries. In Russia, the impaired condition of conventional armed forces is sometimes argued as a reason for emphasis on nuclear capabilities. In China, concern is expressed over the large nuclear arsenals in the United States and Russia, or the nuclear capabilities of India, as reasons limiting China's readiness to consider nuclear arms reductions. And Germany and Japan, though non-nuclear and quiescent on the issue, have an interest in the protection accorded by the American arsenal.

A realistic appreciation of the global context, therefore, is a necessary first step to designing a new, comprehensive role for nuclear weapons. International consensus about the principles and norms surrounding this new role is a prerequisite to moving ahead. In that regard, all of the nuclear weapons states can preserve most of the benefits they now see from possessing nuclear weapons while reducing their arsenals substantially and at the same time avoiding the greater risks of larger arsenals. The United States cannot approach the issue unilaterally with any real prospect of success.

## POLICY AND STRATEGY

If, as suggested, reassurance that nuclear weapons will not be used against us is indeed our overriding interest, how then can it best be pursued? A two-track policy is recommended:

– Among the nations that now have nuclear weapons, designing a security environment that does not rely on nuclear weapons and building consensus that the role of these weapons should be limited solely to providing reassurance against the hostile use or threatened use of weapons by others. Consensus also will be needed that the use of nuclear weapons is not an appropriate response to conventional, chemical or biological attacks.

– And among those nations (and non-national groups) that do not now have nuclear weapons, building consensus to forego their development, as required by the Non-Proliferation Treaty; if such weapons should nevertheless be developed and deployed, deterring their owners from using them or threatening their use.

Backed by verification capabilities of the kinds that already can be made available, much smaller numbers of weapons— one to two hundred at most— will go far in promoting reassurance. As trust and confidence build up and verification capabilities are improved, the necessary reductions could prudently be undertaken. Moreover, such steps can themselves contribute to a more cooperative environment, and add to stable security.

## REASSURANCE MEASURES

It is not just the danger of deliberate hostile use of nuclear weapons that should be our concern. This already seems close to unthinkable among the nuclear weapons states.

The possibility cannot be ignored that miscalculation could occur as the result of doctrines such as launch-on-warning or immediate response tied to high alert levels.

Misinformation or misinterpretation of information from radar or other warning is an ever-present danger— for which there is no lack of examples.

For all nuclear weapons states, a shift to lower states of alert should be a high-priority policy objective, aimed at reducing the pressure for hurried decisions, while being carried out in ways that do not in themselves create instability. Controls to ensure against unauthorized launch should be made universal, and policy emphasis should be placed on reducing the exposure to surprise attack or clandestine action, together with the consequent concern that exists regarding these possibilities. Stringent efforts to avoid accidents should focus, to the greatest extent feasible, on the avoidance of

dangerous conditions and high-risk operational activities. Strict accounting and controls over the weapons in the active stockpiles and those in reserve or awaiting dismantlement, and over weapons grade materials wherever located in the national nuclear weapons infrastructure, constitute another high priority policy objective for all of the nuclear powers. Here is an area to which the Nunn-Lugar Cooperative Threat Reduction Program should give particular attention and support.

The end-state toward which the United States and the other declared nuclear weapons states should work thus seems clear: achievement of the lowest verifiable level of weapons while reducing the risk of accident or miscalculation to the practical minimum, in the interest of stable security.

The task is to get from here to there.

For that purpose, five discrete steps can be identified as a practical and prudent way to plan and proceed. The exact timing will require careful detailed consideration and accompanying actions by the nations concerned, but the steps even now can be set out in broad terms as technically feasible working goals. Negotiation and ratification may well extend the actual flow of events. Nevertheless, an explicit and demanding schedule will be useful— probably necessary— in order to keep focussed on the serious and urgent nature of the tasks.

### **SPECIFIC TIMING**

The overall goal for the nuclear powers— reducing to 100 to 200 warheads— can be set for about 2015 or very soon thereafter. This is an ambitious schedule based on the rate at which they can be safely and efficiently dismantled in Russia and the United States.

This is about the rate at which they were built, i.e., about 2,000 a year. Also, some "friction" can be expected in getting agreement on substantial reductions and carrying them out. Between now and then,

a) START II reductions should be completed by the end of 2007, taking into account the five-year extension agreed at Helsinki. Also agreed, the warheads to be reduced should be removed from their delivery systems well before that date.

b) START III levels, if based on totals 1,000 below START II, could well be reached by the same date, since the groundwork will have been well laid in START II, but should in any case take no more than an additional year or two, say 2009 at the latest.

c) Strategic warheads reduced under the START agreements must be dismantled and fissile material transferred to monitored storage to preclude its reuse for weapons. Also, detailed information must be exchanged on nuclear weapons holdings and inventories of fissile materials.

d) The next step— dismantlement of the many thousands of non-strategic weapons not covered in the START negotiations— poses a more complicated problem. Agreements need to be reached not only on the elimination of such weapons (we should move to end the separate designation, and thereafter deal with *total* weapons) but also on the verification regime, which seems bound to be more intrusive and demanding if the reassurance objective is to be met. Nevertheless, elimination of these weapons would be an appropriate goal to follow START III, to be accomplished in a further year or two, i.e., by the end of 2010 or 2011.

e) An intermediate (START IV) goal of 1,000 weapons for Russia and the United States, beyond START III but short of the hoped for 100-200 weapons end state could prove to be a useful and workable next objective. For Russia and the United States to go below a level of 1,000 or so it would be desirable— indeed both countries would probably deem it essential— to be joined in negotiations by Britain, China and France. Reductions to the level of 1,000 could be scheduled for no later than 2012.

f) The proposed end state— no more than 100-200 weapons for each declared nuclear weapons nation— presupposes that a great deal of new thinking will have been carried out, hopefully along the lines suggested herein. The views that are held in Britain and France are relatively well understood, but much remains to be learned about China's needs and interests. Work will need to be done in developing common understandings comparable to those achieved over the years in the prolonged negotiations between the United States and the Soviet Union, now Russia. Consideration of the views of other leading countries— Germany and Japan, in particular— will need to be part of the process. If policy agreement can be reached, it certainly will be technically feasible to achieve reduction, with prudent safeguards, by 2015— just 70 years after the world's first nuclear weapons explosions took place.

Accordingly, a working schedule as follows can be envisaged, setting the framework for the necessary detailed studies, decisions and plans:

- By the end of 2007: fulfillment of the terms of START II.
- By the end of 2008 (possibly earlier): fulfillment of the terms of START III.

- By the end of 2010 or 2011 at the latest: elimination of all U.S. and Russian tactical nuclear weapons (the so-called "non-strategic" warheads not included in the START III levels).
- By the end of 2012: reduction of U.S. and Russian arsenals to no more than 1,000 weapons each.
- By 2015: reduction of the arsenals of each declared nuclear weapons state to no more than 100-200 weapons.

As earlier noted, many special and vested interests will be affected. The task of reconciling such interests with the changes responsive to the broader national interest will not be easy, and will necessarily set the pace— and determine the feasibility— of moving forward. It may be expected, however, that at each stage of reduction, weapons in excess of the agreed lower levels will increasingly come to be viewed correctly as a costly burden and, until safely disposed of, more a danger than a benefit.

Moreover, it may be expected that reductions along these lines by the declared nuclear weapons states will, through showing their serious commitment to the purposes of Article VI of the Non-Proliferation Treaty, serve to reinforce the credibility of the treaty commitment the non-weapons states have made not to build such weapons, which is the most relevant and realistic source of continuing concern regarding potential nuclear danger in the years ahead. The reductions should facilitate any collective action needed against member states which violate their obligation not to acquire nuclear weapons. It will be difficult for such states to argue that their action was necessitated by the unwillingness of the declared nuclear powers to fulfill their obligations to eliminate nuclear weapons.

There is, of course, much more than simply the dismantlement of the weapons concerned that will need to be carefully weighed, and accomplished, in deciding the feasibility and desirability of the proposed reductions. At every stage each participating nation must be satisfied both as to the fulfillment by other nations of their commitments and the viability and effectiveness of their own nuclear weapons posture. Multiple requirements— for verification, for safe and efficient dismantlement and disposition, for successive reshaping of the forces and the enduring national nuclear weapons complex— form the heart of the challenge.

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<sup>1</sup> The cost of U.S. nuclear weapons and associated infrastructure is estimated at \$36.8 billion, according to Stephen F. Schwartz (editor), *Atomic Audit: The Costs and Consequences of U.S. Nuclear Weapons Since 1940* (Brookings Institution Press, 1998).

Nothing seems unmanageable if necessary action is identified and initiated in a timely manner. For this purpose it will be useful to recognize and specify in some detail the key actions and the necessary prerequisites over the 18 to 20 year timespan envisaged. A first effort along these lines is sketched out in the following paragraphs.

### **ACTIONS TO BE TAKEN; CHANGES TO BE MADE**

Both in overall nuclear weapons posture and within the nuclear weapons complex, changes will be many and profound. The most important can be identified and specified through a sequence of operational taskings closely coupled to the successive reduction stages, beginning with START II.

Reduction from the 6,500 weapons of START I to the 3,000-3,500 of START II offers substantial savings in cost, manpower and excess infrastructure. These reductions and accompanying verification should be brought into effect by 2007 or earlier if possible.

The principal actions to be taken have in most cases been well identified and are simply awaiting treaty ratification by the Russian Duma. If possible, further reductions to START III levels— likely to be set at 2,000-2,500 strategic weapons— should be carried out by the same date, but if not, then by the end of the following year.

#### *START III*

Tasking for the anticipated START III level would include, for the U.S. strategic nuclear force:

- determination of the composition of the 2,000-2,500 force; deployment of the force, minimizing the vulnerability to attack or terrorist actions and assurance of the safety and security of the deployed forces.

- maintenance of operational readiness, alert states and response times at the lowest levels consistent with the assured survival of the force and the demonstrated capability to execute mission assignments. Lowering of alert states will reduce pressures toward hurried response decisions and miscalculation, and move away from the reciprocal adversarial U.S./Russian nuclear postures that have existed in the past.

- modifying targeting doctrines in accordance with the change of posture and as required by the reduced numbers of remaining weapons. Reliance should be placed on the general deterrent effect inherent in the existence of the weapons.

Tasking for the agencies that are involved in monitoring foreign nuclear activities or in giving cooperative support, e.g., under the Nunn-Lugar Cooperative Threat Reduction Program, would include:

- . adequate funding for increased verification requirements to monitor adherence to agreed reduced force levels. Because the potential advantage of surreptitious stockpiling will grow as force levels are reduced, confidence must be high in national technical and international verification efforts. Also, the forms of verification will shift from deployed strategic systems to warhead accountability and dismantlement. In addition, more countries will need to be included in verification regimes.

- . intensified surveillance aimed at detecting possible proliferation or possible new dangers such as the deployment of nuclear weapons in space.

- . cooperation and support for establishment of effective regimes for safeguarding and accounting of weapons, weapons materials, production equipment and weapons components.

For the Department of Energy nuclear weapons complex, tasking would include:

- . assuring the safety, reliability and performance of weapons to the maximum extent possible in the absence of nuclear weapons testing.

- . conducting an intensive surveillance program and maintaining a re-manufacturing capability; providing replacement material, in particular, the tritium required to maintain the weapons retained.

- . maintaining a capability for expansion of the complex if ever required in response to actual or threatened foreign "breakout" or clandestine proliferation.

- . safeguarded disposition of weapons, components and weapons-grade materials made redundant by stockpile reductions.

### *START III Expanded*

After reaching a START III agreement, negotiations should have as their next goal the elimination of non-strategic weapons of all kinds. Among the issues already identifiable are the categorization of such weapons according to basing mode, weapons types, numbers and locations; feasible dates for elimination (no later than one to two years after completion of START III reductions); provisions for dismantlement of the weapons that are to be eliminated and safeguarded disposition of their nuclear materials, verification and inspection as needed; and methods of assuring neither party

is at a significant disadvantage at any point during what will probably be a step-by-step reduction process extending over several years. While actual negotiation must probably await the conclusion of START III, the development by the United States and Russia of proposals for each other's consideration can and should begin at once. The added operational tasks and modified operational responsibilities incident to elimination of these weapons will include:

- . within the Department of Defense (and in the Russian Ministry of Defense), elimination of the operational concepts, training, organizations and infrastructure responsible for tactical nuclear weapons.

- . development of procedures to provide accountability of all non-START III weapons, together with assurance that all have been declared.

- . time-phased procedures for the return of all such weapons to the Department of Energy (and to the MinAtom in Russia) nuclear weapons complexes for dismantlement, disposition of the weapons-grade materials and destruction of all other components.

- . development of procedures to verify how many weapons of what types have in fact been dismantled, what disposition has been made of their weapons-grade materials, with effective safeguards and accountability established, and that all remaining components have been destroyed.

#### *START IV*

For the next step, reduction of U.S. and Russian nuclear weapons to the level of 1,000, the tasks involved will parallel those enumerated for START III:

- . First, of course, is the actual negotiation of the agreement, which can begin once START III is well underway.

- . Joint action by DoD and DOE will be required to determine which types of weapons will be retained.

- . Any necessary changes in deployments will need to be determined by DoD.

- . Continued stewardship of the weapons remaining in the inventory, to give reassurance as to their safety, reliability and performance, will continue as the principal role of DOE, along with the secure disposition of the weapons and their nuclear materials made excess by the reduction.

*START V*

For the final step— reduction to levels of no more than 100-200 weapons for each of the declared nuclear weapons nations— searching examination and deliberation must be anticipated as a prior requirement. The varying national interests involved as seen by the nations concerned, which will have to be reconciled and satisfied to an acceptable degree, guarantee that the task will be complicated and challenging. While actual negotiation may be many years away, it is not too early to begin building a fuller and deeper common understanding of the issues involved. For this purpose, familiarization with the elements of operational tasking as outlined above, and careful consideration of national interests, policies and strategies could prove useful in initiating serious discussions. As earlier noted, the conduct of such discussions with China will be of particular importance.

If the necessary agreements to move to these levels can be reached through the persistent efforts that will be necessary to build consensus among the nuclear weapons and non-nuclear states, the requirements of operational tasking each country would face would parallel those suggested for *START III*. To firm up the commitment to this nuclear weapons regime, the gains in stable, improved security for each country will have to be seen to outweigh the risks and restrictions accepted. Indeed this can be the case, but obviously, it is not all of the story. Many other issues will enter into the picture at various stages. Other tasks and trade-offs will need to be faced. Domestic resistances and pressures, typically mediated through the Congress, will be encountered and have to be surmounted. The interests of non-nuclear weapons countries will need to be considered, with those of Germany and Japan being of special significance. The weapons capabilities of the undeclared weapons countries will have to be assessed in relation to these proposals. And the potential of hostile states and terrorist or other non-state groups will be a continuing concern. But none of these or similar issues seem to be "show-stoppers."

In summary, we find ourselves at a time of historic opportunity. To seize that opportunity by carrying out the comprehensive approach that is needed, determined leadership by the U.S. president will be indispensable. The stakes are high enough to justify such a commitment, which clearly will require sustained energy, coherence and coordination.

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## ABOUT THE AUTHOR

### **General Andrew J. Goodpaster, U.S. Army (Ret.)**

General Goodpaster was Staff Secretary to President Eisenhower from 1954 until 1961. He commanded an Engineer Combat Battalion in North Africa and Italy during World War II, and in 1944 was called back to Washington to serve as a strategic planner for General Marshall in the War Department. Subsequently, General Goodpaster served as Commander of a U.S. Division in Germany; Assistant to the Chairman, Joint Chiefs of Staff; Commandant of the National War College; Deputy Commander of U.S. Forces in Vietnam; Commander-in-Chief, United States European Command and Supreme Allied Commander, Europe. After his retirement, he was recalled to active duty as Superintendent of the U.S. Military Academy in 1977, serving until 1981. General Goodpaster is the Chairman of the Atlantic Council of the United States and heads its project on nuclear arms control.

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# THE FURTHER REINS ON NUCLEAR ARMS PROJECT

The project is conducted under the auspices of the Atlantic Council's Program on International Security and seeks to develop a common vision of how to reduce the risks of nuclear weapons. To date, the project has produced the following publications:

- Ø *The Road Beyond START: How Far Should We Go?* Consultation Paper by Jonathan Dean. March 1997.
- Ø *The Future of Nuclear Weapons in World Affairs*, Bulletin by Sir Michael Quinlan. November 1996
- Ø *START III Negotiations: How Far and How Fast?* Consultation Paper by Jack Mendelsohn and Oleg Bykov. October 1996.
- Ø *Nuclear Weapons and European Security*, Policy Paper; Chair: Andrew J. Goodpaster; Project Director: C. Richard Nelson; Rapporteur: Steven Philip Kramer. April 1996.
- Ø *Nuclear Weapons and European Security*, Bulletin by C. Richard Nelson. October 1995.
- Ø *The Indivisibility of Arms Control: Saving the CFE Treaty*, Bulletin by Jeffrey D. McCausland. September 1995.
- Ø *Ukraine's Key Role in Nuclear Non-Proliferation*, Bulletin by C. Richard Nelson and Scott A. Kocher. September 1995.
- Ø *Strengthening Security Relations Between Russia and the United States*, Bulletin by C. Richard Nelson. August 1995.
- Ø *A Minimum Deterrence Regime for South Asia*, Bulletin by Naeem Salik and Maroof Raza. June 1995.
- Ø *Interim Arrangements for North Korea: Are They Secure?* Bulletin by C. Richard Nelson and Kenneth Weisbrode. December 1994.
- Ø *Further Reins on Nuclear Arms: Next Steps for the Major Nuclear Powers*, Occasional Paper by Andrew J. Goodpaster. August 1993.
- Ø *Tighter Limits on Nuclear Arms: Issues and Opportunities for a New Era*, Occasional Paper by Andrew J. Goodpaster. May 1992.

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