As I believe most of you realize, this will be my last report as Pugwash Secretary General. In the circumstances, I intend to focus not mainly on the events of the last year, but rather on those of the whole five years I have served as Secretary General, weaving in comments about particular workshops that I think might be of special interest. I would note here that we have had excellent reportage of the workshops during these years and that many of the best papers have been published, largely due to the work of Jeffrey Boutwell. I will in no sense attempt to cover all that ground. I intend to conclude with observations about future challenges.

My focus will be particularly on the United States, in part because we are meeting here, and because an unusually large fraction of you are from this country: mainly though because it is the only super-power in the world and because, since the election of President Bush, the policies of the American government have moved so dramatically and so far towards unilateralism.

Should we, in hopelessness, rail against this or alternatively confine our activities largely to problems in which the Bush Administration is likely to be so little interested as to not get involved? In my view, quite the contrary, a point I will develop in my concluding remarks, but I feel I should say now that I see no basis at this time for believing that President Bush and most of those in the next couple of levels down in his Administration will experience a Saul-on-the-road-to-Damascus kind of conversion or epiphany.

Now, I would turn to the events of the last five years, first commenting briefly on changes in the international scene and then on what Pugwash has tried to do in the context of that changing scene.

The Cold War is over, and in my view, was so a dozen years ago. But this has not been fully reflected in important circles in the United States and Russia, and most
particularly in a large part of the arms control and disarmament community, including Pugwash.

Even as recently as in the last several years we have heard and read much about balanced force reductions in Russian and American nuclear stockpiles: reductions from tens of thousands of nuclear warheads by factors of around two and of operationally deliverable strategic nuclear warheads down to the range of 2000 or so, as if such reductions were militarily and politically meaningful. I, in contrast, believe that very likely there is a threshold of delivery capability above which there is essentially no political and/or military utility in increasing force levels—and to which there would be advantage in reducing them because of the likelihood of reduced damage should nuclear weapons be used destructively and because of the greater cost and likely greater possibility of accidents and/or proliferation with high force levels. I would suggest that the threshold level may be in the range of 50 deliverable weapons for the United States (and Russia)—and perhaps as low as zero for the U.K. and France. Others will certainly disagree with my number of 50, but I come up with it believing that other states’ political-military decisions regarding the use of force are not likely to depend significantly on whether the United States retains a capability of delivery of 50 nuclear weapons or 2000: for example, Iraq’s again taking aggressive actions against its neighbors. I believe, however, that at some lower level, perhaps in the range of 10 to 20 weapons, Japan, South Korea or Taiwan might so question the American security guarantee under which they now live as to decide to acquire national nuclear capabilities. And, I’m not at all sure that that’s a happy trade-off: having the United States (and perhaps Russia) reducing their effective nuclear capabilities down to the range of a dozen weapons each if the price is the emergence of new nuclear powers in the Far East and/or Southwest Asia.

The other most important change in the international scene I have already alluded to: the emergence of the United States as king of the hill, with an Administration committed to unilateralism and with a phobic reaction to international arms control and disarmament agreements, both existing and prospective; and with a belief in the continuing and perhaps expanded utility of a broader range of nuclear capabilities, not so much for deterrence or other political purposes, as for actual use for preemptive attack including most especially against hard-to-destroy targets.

Consider the American withdrawal from the ABM Treaty. The Administration had come to believe, quite misguidedly in my view, that a National Missile Defense that would be both technically effective and worth deploying could be built. It then decided that continuing adherence to the ABM Treaty would be an inhibiting factor in the realization of its objective but would have no corresponding effect on Russian aspirations—or on those of any of the other successor states to the Soviet Union. None were in a position economically to pursue such a program, nor would
the ABM Treaty have any inhibiting effects on any other nation since no others were either parties to the Treaty nor had any apparent interest in developing defenses that would be affected by it. Discounting, then, the opinion of other nations--and many Americans--the Administration could logically conclude that the Treaty was outmoded and disadvantageous to the United States, while having no meaningful effect on the aspirations of any other state. So, why not withdraw from it?

And, why negotiate seriously with Russia--or any other state--on reductions in strategic arms or, for that matter, about many other issues, given that other states would generally be far more constrained by economic and technological limitations in what they could do than would be the United States?

I would here make a side comment about negotiations with the Soviet Union at the height of the Cold War. We had some success in the ABM, SALT and START negotiations, but these were all carried out under very special conditions that are unlikely to obtain at any time during at least the foreseeable future (except possibly as between India and Pakistan). There was an extraordinary degree of symmetry in the situation of the two superpowers. Both appeared to be able to run a competitive race in missile delivery capability and neither had an effective ABM defense capability or much prospect of developing one that could not be easily countered at less cost by adversary improvements in offensive capabilities. By analogy one might have thought that if the ABM Treaty made sense, why not negotiate similar treaties on anti-aircraft defense and anti-submarine warfare? This was never even tried. The Soviets had too much of a lead in the former and the United States too much of a lead in the latter. We talked a little in the early 70s about limiting work on, and deployment of, multiple independently targetable re-entry vehicles (MIRVs), but never even got to the point in those days of negotiations about them. The United States was so far ahead that the American military was unwilling to forewear what they saw as an advantage, and the Soviets were not interested in being frozen in a position of inferiority.

And, if we got nowhere with these problems of asymmetry in bilateral negotiations with the Soviets, consider how poor the prospects must be for serious negotiations with the Russians, given the asymmetries that now exist; and, worse yet, how poor the prospects must be for progress in multilateral negotiations, given the classic problem of n>2 game theory: the possibility of coalitions. (And this may be a problem even in the Indo-Pakistani case: the possibility that other significant powers might get involved, perhaps China siding more or less with Pakistan and Russia more or less with India.)

Does this mean that approaches to arms control and disarmament through negotiated agreement are outmoded? Not quite. There is still the possibility of agreements that are unambiguously advantageous to all parties to them, even if the
advantage to some may be greater than to others. Controls on exports of some kind of weapons and/or of critical components to third parties are examples; and dealing with the problems of loose nukes, inadequately protected fissionable materials, and loose, impoverished scientists and engineers in Russia with weapons expertise is another. And, there is the possibility that the American administration would go along with limitations and/or reductions in arms that it might not consider narrowly advantageous to it if other parties would make concessions to American interests in unrelated areas.

But I do suggest that the era of ABM/SALT/START kinds of agreements that dominated the thinking of many of us throughout the Cold War has come to an end, at least in so far as the United States might be involved.

I turn now to the questions of criteria for deciding on the allocation of Pugwash’s efforts to different problem areas.

1. Pugwash should focus on problems of importance, and, in general, since it is an international organization, on those of direct concern to more than one country. This seems so obvious as to hardly merit mentioning.

2. It should concentrate its efforts in areas where it has comparative advantage over other like-minded organizations. This turns out to be a very difficult proposition or dictum for it to live by, and I think it is only fair to say that the majority of our Council members do not agree with me on this matter. It is especially troublesome that with respect to most nuclear weapons issues, where Pugwash once had a probable lead over other NGOs, this is no longer the case. At least, the CISAC (Committee on International Security and Arms Control) of the US National Academy of Sciences and the analogous group of the Russian Academy can typically mobilize groups with more expertise than can Pugwash. (I call your attention to the lean participation of Russians here, including the fact that only one was scheduled to be in the working group dealing most directly with nuclear weapons issues--and, because of visa problems, he did not get here). The only significant areas where I think we now have an unequivocal comparative advantage over other NGOs are in chemical and biological warfare.

3. Pugwash must concentrate its efforts generally on what I will call knife-edge problems: on decisions where the forces on the two sides of an argument are close to being in balance: problems where possible Pugwash involvement might be instrumental in pushing the decision one way or the other--and on a time-scale measured in months or years; not one measured in decades. The uncertainties about world politics are just too large (and the personal discount rates of most of us are just too high.)
If I had more time, I would here get into a systematic discussion about criteria for measuring success of our efforts. As it is, I will do so only episodically as I discuss a selected sample of those workshops we have had in the last five years. I would, though, mention that such an assessment is, I think, highly desirable. I have proposed, with essentially no receptivity, that Pugwash would benefit by having an audit or visiting committee largely composed of non-Council people to review and evaluate its work.

I will turn first to two workshops that we had in Paris in May and December 1998.

We had had an extensive discussion at the 1997 Lillehammer conference of the American proposal that NATO be enlarged to include Poland, Hungary and the Czech Republic, and the Council included in its Lillehammer Statement a number of arguments against such an expansion. Most of the Council--but not all--were, I believe, opposed to expansion; and mobilizing opposition struck me as an extraordinary “knife-edge” opportunity for Pugwash. All that would have been needed to defeat the proposal was a dissenting vote by any one out of 16 (NATO) parliaments; and how often is Pugwash likely to have 16 shots at killing a bad idea? So, I, with the help of Venance Journé, organized the May workshop in the hope that at least one parliament might be persuaded to vote against NATO enlargement. It was too little, too late. But why had Pugwash not taken up the issue before Lillehammer? Could it have been because of its rule that all important decisions must be made by consensus? If so, I suggest it is a strong argument for abandoning this rule. But I doubt that this was the reason, since I am unaware of any Pugwashites except Hugh Beach and myself vigorously opposing NATO enlargement in 1997. Was it just blindness to opportunities or general unwillingness in the Council to oppose the United States?

The second Paris workshop, a Franco-British initiative, was on nuclear power. I was skeptical about this because I had been involved earlier in two large American studies and a much larger 60-nation one, and was unaware of significant new developments in the intervening years. My skepticism was in large measure justified. Notwithstanding the participation of some very highly qualified people and the production of excellent papers, which were then collected in a book, I am unaware of the workshop having had any impact on significant decisions by governments or international institutions. Our scale of effort was perhaps too small, but more significantly, the timing was, I believe, not propitious. Still, I would count the effort at least a qualified success in that we provided an opportunity for worthwhile, sophisticated exchanges between people, some of whom had not been previously acquainted; and we brought new expertise into the Pugwash fold, something I have felt should be an important secondary objective of all of our activities.

I turn now to two workshops that we had in Havana in October 1998 and February
2001 on public health and medical research. I had initiated these mainly as a bridge-building effort between Cuban scientists and the broader international community, including particularly Americans, at a time when it seemed opportune. Even though the Bush Administration, many right-wing Republicans, and many Miami Cubans had been strongly opposed to normalization of Cuban-American relations, sentiment for it was growing in the American Congress, much of the business and agricultural communities, and among many other Americans. It seemed like another “knife-edge” opportunity. I picked public health and developments in the pharmaceutical industry as topics for discussion because these, particularly the former, were areas where Cuba quite clearly led the developing world. I cite this effort here particularly because I think it the best example in my experience as Secretary General of follow-through to work-shops. Jeffrey Boutwell produced the first of our Issue Briefs, and it has been widely distributed, including to all members of Congress; and he, Ken Bridges of the Harvard Medical School, and Elliot Schiffmann of the US National Cancer Institute met with a number of members of the US Congress and their aides to discuss the workshops and the importance of terminating the US embargo of Cuba. The fact that three Cubans whom we invited to this meeting were denied visas suggests that we still have work to do, but it does seem to me that our efforts relating to Cuba deserve high marks. We have been on the right side of a battle that can be won.

Now, brief comments on two workshops we had in Sigtuna, Sweden.

The first, in October 2000, was to inform Europeans about American programs for anti-ballistic missile defenses and, most notably, to mobilize discussion of U.S. National Missile Defense efforts. This seemed sensible because the NMD proposal seemed nonsensical to most technically informed Americans and to a number of European governments, and it seemed likely that Pugwash might, considering its large European constituency, have some advantage over US NGOs in trying to stop this foolish program. Moreover, it seemed likely that upgrading of radar stations in the UK and Greenland would be important parts of the program, so we made an effort, as it turned out, a successful one, to get highly qualified participants from these two countries, including, I believe, unprecedentedly, an Inuit woman from Greenland who was active in opposing upgrading of the Thule radar. We produced an Occasional Paper based on the workshop. Whether or not our efforts will have any impact remains to be seen.

The second Sigtuna meeting, with emphasis (at the Swedes’ request) on tactical nuclear weapons, had an unexpected pay-off for this audience in that one of the background papers was the one you heard discussed here by Mike May. On the basis of my reading of it, and the exceedingly favorable reaction to it in Sigtuna, I urged Mike to present it here, and with his permission, am now trying to get hearings built around it before the US Senate Foreign Relations and Armed
In early September, 2001 we had another workshop, this one in Como, Italy, on Nuclear Stability and Missile Defenses. With the September 11 terrorist attacks just a few days later against the World Trade towers in New York and the Pentagon in Washington, DC, world attention shifted to those events, and one can only speculate about whether the Como workshop had, or ever will have, any direct impact on international affairs. I mention the workshop with a particular point in mind. I had made a special effort to get participants who could knowledgeably discuss the domestic politics of decision-making as regards weapons development, acquisition, deployment and use, where there are very powerful actors with radically different views involved. I hit the jackpot, particularly as regards the United States. We had not only Steve Miller, who is always very good on such topics, but 5 or 6 other Americans with great knowledge. In addition, we had very informative interventions from several other countries.

I turn now to what has been for me a perplexing anomaly about our work of the last five years. In, I believe, all of the 19 annual conferences in which I have participated, the working groups on nuclear weapons issues have always been the most popular. Yet, we have had, since I have been Secretary General, great, and increasing, difficulty, in getting effective, knowledgeable people from the nuclear weapons states, other than the United States, to participate in our workshops on nuclear matters. Our meeting in Moscow on Strategic Stability last month is dramatically illustrative. We had no one from China, India, Pakistan or Israel; only one each from France and the UK; but 12 from the United States; and while many Russians participated part time, several of those with whom we have had the most useful discussions in the past did not show up at all. With very little information about possible participation even up to the day of departure for Moscow, I seriously considered canceling the meeting.

In turning to what I think are some of the major programmatic areas to which I believe the Pugwash Council should give urgent attention, I begin with the questions of humanitarian intervention, sovereignty, international security and human rights. My work in this area began in the mid-1990s with a seminar that I and Carl Kaysen organized for senior graduate students at MIT. It ran for about three years, more-or-less concurrently with another effort by the two of us and more senior participants on presenting the case for a volunteer UN military force. Pugwash efforts emerged out of a workshop in Castellón de la Plana, Spain that was ostensibly to be about the utility of NATO. However, by the time we met in early July, 1999, the much-debated allied intervention in Kosovo had become a hot topic, and much of our July meeting focused on this.

This was followed by four more work-shops on intervention and sovereignty,
culminating in one in Pugwash, Nova Scotia in July 2001 held jointly with the Canadian-managed International Commission on Intervention and State Sovereignty. We had an unusually diverse group of participants in these workshops, most from outside the usual Pugwash circles, including notably two hard-to-get people with needed specialized knowledge of international law. Two commendable volumes in our Occasional Paper series were published in February 2000 and January 2001. Notwithstanding our having had four plus meetings, I see this effort as very much a work in progress. Most intervention efforts have not worked out well: to cite extreme cases, those in the Congo in the 60s and those more recently in Rwanda, Somalia and Haiti have left these countries in scarcely better shape than before the interventions occurred. Yet, more such problems are likely to be with us for as far into the future as I can see. I remain deeply troubled about the criteria for intervention, about who should be involved, and about post-conflict reconstruction and governance.

Next, I would highlight the problems of terrorism. With societies increasingly interdependent and in many ways increasingly fragile, and with means of massive destruction and disruption becoming increasingly available, I have little confidence that the problems can be largely dealt with through denial of capabilities and physical protection of valued assets. I suggest that the causes of terrorism, and which kinds of actions even merit the sobriquet, ought to get a lot more attention than they are now getting by governments and NGOs, and that Pugwash can have a comparative advantage in considering them--and those of intervention, as well--given the diversity of its constituency.

I would close by noting that during the years I have been Secretary General we have commonly had at the end of the agenda for our Council meetings an item, “Situation in Troubled Regions”, followed by a short specific list, but I can recollect no instance of our ever having gotten to this agenda item. I suggest that the Council should in the future find time to do so, if necessary by extending its annual meetings.

One of the problem areas which has not been on Pugwash’s troubled regions agenda, but which I feel must be there, is sub-Sahara Africa, given the AIDS pandemic, and that, in recent years, internecine slaughter and genocide has resulted in an enormous number of fatalities; in Rwanda and the Congo alone, roughly ten times as many as were produced by the Hiroshima and Nagasaki bombs.

This year, I suggested very seriously, and probably without precedent, that, in light of the Bush Administration’s commitment to unilateralist approaches to international affairs, the United States should also be included in the Pugwash list of troubled regions.

But, I would now conclude my remarks by hypothesizing that with its somewhat complex separation-of-powers kind of government and some very powerful
interest groups opposing many aspects of the Administration’s policies, the United States might equally be in what I have characterized as a knife-edge situation: one where there is in the public, in the higher echelons of the military services and in the very evenly divided US Congress, such strong and growing opposition to much of what the Administration would like to do that there is a real possibility of many of President Bush’s wishes regarding unilateralist approaches to international relations and the use of force being largely thwarted—if war in Iraq can be forestalled until after America’s mid-term election this November. I much regret that I did not have the wit to schedule for this Conference a panel discussion on this hypothesis.

I apologize for the length of my remarks. Thank you for your attention.