#### Testimony of

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Select Committee of Energy Independence and
Global Warming and the Intelligence Community Management Subcommittee of the House
Permanent Select Committee on Intelligence

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I am honored to be able to contribute to the hearings of the Committees on the recent National Intelligence Assessment (NIA) on the National Security Implications of Global Climate Change to 2030. I appreciate the opportunity to respond to your questions concerning the NIA, the concerns of military planners regarding climate change, and how the intelligence and military communities should plan for the various climate change scenarios. My testimony today reflects my personal views and does not necessarily reflect the views of the Army, the Department of Defense, or the Administration.

Climate change has surfaced as a critical security issue in the post Cold War era. While conflict between nation states remains central to security studies, security strategists now see that regional stability depends on governments maintaining legitimacy by meeting the basic needs of their populations. The effects of climate change can overwhelm the capacity of fledgling democracies to meet those needs. Because climate change may worsen existing tensions and help destabilize regions, it is a worthy topic for intelligence community research, military planning, and interagency cooperation.

My comments are informed by my experience in the field of environmental security. In the 1980s, I served as a defense attaché and security assistance officer in Africa where I dealt with the humanitarian assistance and security implications of massive cross-border migrations of refugees fleeing drought and conflict in Mozambique. In the 1990s, I co-chaired the NATO Environmental Security Pilot Study Meetings and served as a member of the US delegation to the OECD environmental security meetings in Prague. Since then, I have had the opportunity to help the Combatant Commands develop environmental security engagement programs aimed at promoting sustainability, stability and multilateral cooperation in their areas of responsibility, and work with the intelligence community on efforts to explore the links between environmental change and security.

### **National Intelligence Assessment (NIA)**

I was asked to review the NIA in preliminary and final forms and received briefings from its lead authors earlier in the process, when they sought feedback on their methodology from the military security community. I found the NIA to be a fine effort that is broad in its approach and includes the various levels of resolution concerning global climate change and security. The strategic issues are given appropriate emphasis, and the NIA spells out regional effects that could lead to instability and conflict. In this way, it encourages the security community to explore proactive approaches to security issues. One of the weaknesses of the US approach to foreign policy has been its reactive nature and lack of emphasis on taking preventive action. While the Bush administration National Security Strategies (NSS) emphasize three pillars for protecting US national security interests: defense; diplomacy; and development, the largely reactive defense component receives the lion's share of resources, and the diplomatic and development functions are reduced to seeking reprogramming authority from defense to accomplish their mission. The NIA provides a powerful justification for increasing the funding for the other two NSS pillars and seeking to mitigate climate change affects before they could lead to costly humanitarian crises, intrastate conflict, regional instability, or tensions between the major powers.

Because of the breadth of its topic the NIA needed to highlight many significant areas that would warrant their own assessments. One of these areas is determining the regional implications of global climate change for US national security interests. Such an assessment could follow the approach of previous US National Security Strategies by articulating US national security interests in each region, then evaluating the implications of climate change for those interests: where are there threats; what opportunities are created? There should be much interest in the new administration and Congress concerning preventive defense and peace building activities. Environmental security issues such as climate change are excellent candidates for such an endeavor. The intelligence community could prepare for that interest by publishing an intelligence document that points out the benefits of using climate change as a catalyst for multilateral and other forms of cooperation. Such confidence building measures can be dedicated toward encouraging stability, and building governmental capacity and legitimacy. While much environmental security and climate change data is open source, there are many regions where data is currently unavailable or limited. The capacity of individual governments to mitigate or adapt to climate change affects would be difficult to discern and a proper topic for intelligence community research.

# Military Planners and Climate Change: Terrorism and China

The US relationship with China is the subject of intense debate in both the United States and in China. Much of the discussion centers on the implications of China's economic growth. China is no longer autarkic and must increasingly import large quantities of industrial minerals and materials and energy resources to sustain an economy that is growing at approximately 10 percent annually. So too, the United States is import dependent and finds itself competing with China for influence and minerals access in two critical regions where the effects of global climate change are increasingly apparent, the Middle East and Africa. Military planners have no choice but to concern themselves with the competition for increasingly scarce resources and the effects of climate change on that competition.

There is no wall to protect China from global climate change. Domestically, China is already feeling the effects of climate change on its economic growth. China is water stressed in many

critical areas; large areas around Beijing have been removed from irrigation due to over pumping of water resources and subsidence. Increasingly powerful storms bring devastating flooding to coastal areas and southern China. The health effects of pollution from coal-fired power plants on the workforce are increasingly problematic. However, the international effects of climate change may have a more direct impact on China's economic growth.

The impacts of climate change create common interests among countries as well as competition. The Middle East and Africa are two climate stressed regions that provide the essential resources for the Chinese economy. Ariel Sharon, Boutros Boutros-Ghali, and Yitzhak Rabin have all spoken forcefully about the potential for water scarcity and conflict in the Middle East. Africa, where the effects of climate change are most profound and which leads the world in extra deaths from climate change, has the world's largest reserves of the strategic minerals chromium, cobalt, platinum and manganese, and already supplies 30 percent of China's oil imports. Because the United States is similarly dependent upon these two regions for its mineral imports, the two countries share a common interest in maintaining stability and ensuring dependable access at reasonable prices. Cooperation between the United States and China on mitigating the effects of climate change and encouraging the development of adaptation capabilities in mineral producing regions are significant areas that could serve as confidence building measures between the two powers. This could also ensure a stable supply of mineral resources to an already tight world market and promote regional stability.

The United States has done well at attacking and disrupting terrorists and their organizations, and defending the homeland. It has done less well in a struggle against terrorist ideology that threatens moderate Muslim regimes. Many countries that face a terrorist threat suggest that the United States must place more emphasis on winning the ideological struggle if it is to succeed in the struggle against terror. State political systems unable to meet the demands placed upon them by the population struggle to maintain legitimacy and power, and invite the introduction of alternative or extremist ideology. Global climate change places additional demands upon the political system that many developing states cannot meet. Scarcities of resources, lack of safe water, reduced agricultural capacity; widespread disease and poverty create underlying conditions that terrorists seek to exploit. According to the World Bank, intrastate conflict is 15

times more likely to occur in poor countries than in the industrialized countries. Food riots in Cairo at a time when members of the Muslim Brotherhood are running for election demonstrate the problem.

Climate change fans the fires of regional instability and creates opportunities for terrorists. According to the 9/11 Report, "When people lose hope, when societies break down, when countries fragment, the breeding grounds for terrorism are created." United States interests turn on regional stability. Climate change issues are now recognized as a multiplier for regional instability and conflict, exacerbating tensions resulting from religious, ethnic, and other local differences such as socio-economic disparities between rural and urban areas, rapid economic development, and border disputes.

Military planners are responding to the demands of their leaders for proactive approaches to issues such as competition with China and the underlying conditions of terror. The costs of the Iraq and Afghanistan wars are encouraging fresh thinking about preventive defense in addressing issues that could destabilize regions and lead to conflict. The NIA and the Center for Naval Analysis Climate Change and Security Report are not alone in addressing the climate change and security link. DOD Directive 3000.05 has prioritized stability operations by US military forces and increased the number of military planners and developers of doctrine in this emerging area, thus creating an attentive audience for these products. What is needed is increased priority on identifying and addressing the security effects of global climate change, to include increasing funding for such integral agencies as the Department of State and USAID, and a strong mandate for interagency cooperation that would further encourage military leaders to develop the capacities of host nation militaries for supporting civil authority in addressing climate change issues.

### **Prioritizing Climate Change Scenarios**

Planning for the impacts of global climate change in the intelligence and military communities should balance high impact, low probability scenarios with low probability, high impact scenarios. It is important to plan for low probability, high impact events to identify the long lead

time responses necessary to ensure US national security interests. Such planning has the additional value of indicating to vulnerable countries that the US takes the threat to their existence seriously. As the military has learned on the battlefield, security planners need to prepare for what the threat can do, not just for what the threat is most likely to do. Planning is cost effective and must be performed to identify gaps in preparedness and vulnerabilities within the narrow window during which mitigating steps may be possible. Without such planning and analysis, the necessary debate over allocating scarce resources and developing new predictive models and technologies is much less likely to occur.

Planning for and working with allies to mitigate the high probability, low impact climate change scenarios could receive early emphasis as they provide a more immediate return on investment, but not at the total exclusion of lower probability events. The communication and trust with allies and vulnerable developing countries built by cooperative efforts to develop mitigation and adaptation capabilities reinforces existing processes and provides a framework for addressing high impact, low probability events. Cooperative efforts to develop mitigation and adaptation capabilities build communication and trust with allies and vulnerable developing countries. Emphasizing this high probability strategy will pay immediate benefits by providing critical support to sustainable development and the actions necessary to prevent failed states. Addressing the high probability "close in" targets creates a framework for monitoring and addressing potentially catastrophic low probability, high impact scenarios.

The National Intelligence Assessment on National Security Implications of Global Climate Change to 2030 makes a significant contribution to US national security by reinforcing the security dimensions of climate change and encouraging its further inclusion in US national security planning. As I have indicated there is a pressing need for more intelligence community research into the emerging geopolitical vulnerabilities associated with this phenomenon.