



**NATIONAL SECURITY
AND THE THREAT OF
CLIMATE CHANGE**

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TESTIMONY OF

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**Member, Military Advisory Board
To The CNA Corporation Report
“NATIONAL SECURITY AND THE THREAT OF
CLIMATE CHANGE”**

BEFORE THE

COMMITTEE ON FOREIGN RELATIONS

U.S. SENATE

MAY 9, 2007

Thank you, Mr. Chairman, for your invitation to testify before this Committee.

My name is Joseph Prueher. I served the people of the United States for 39 years as a Navy Officer. My last position in the Navy was as Commander-in-Chief of the US Pacific Command. After retiring from the Navy, I served, under Presidents Clinton and Bush, as our Ambassador to China.

Today, I am here with two of my colleagues, General Chuck Wald and Admiral Richard Truly. We'll each touch on different parts of this issue; hopefully, the three of us together can give you a sense of the complete picture, as we see it.

Along with other retired three- and four-star Flag Officers from the Army, Navy, Air Force and Marines, we agreed to serve on a Military Advisory Board to the CNA Corporation to consider the potential impacts of climate change. Using our experience as military leaders, we were asked to assess the national security implications of climate change.

In speaking to you today, here are the points I'd like to stress:

- There is a direct linkage between climate change and energy security. As we work to address one, we can make progress toward the other.
- Climate change will exacerbate many of the causes of instability that exist today. Those instabilities are part of the underpinnings of extremism.
- Climate change will become a significant national security issue. Now, let me explain how our group reached its conclusions.

Like most of the others on the Board, owing to conflicting reports, I entered our discussions with skepticism about the arguments surrounding climate science and about the factors that might drive climate change. But with all the scrutiny we could muster, all of us came to see that there are some areas of broad agreement in the scientific community.

There are several facts on which almost all scientists agree. Climate change is occurring now, with warming trends in most regions. Atmospheric carbon is higher than at any point in the last 400,000 years, and is increasing. There is a linkage between increased temperatures and increased carbon levels (along with other greenhouse gases) in the atmosphere; that relationship is complex, but it does exist.

There are other things we don't know. We don't know exactly what kinds of effects climate change may bring – we just know there is a range of possible effects. On the low end, we are likely to see rising temperatures, increased storm intensity, and shifts in precipitation and drought patterns. These are Katrina-like events. On the higher end of the spectrum, we could see more dramatic shifts in weather, the spread of infectious diseases, rapid loss of glaciers, and sea level rise.

This range of projected environmental effects will in turn affect societies. If, as projected, precipitation patterns change, an already-stressed nation's access to food and water can be limited. If, as projected, extreme weather events occur more frequently, a poorer nation's infrastructure can be decimated. If, as some project, sea levels rise, human migrations may occur, likely both within and across borders. These are issues that can, and will, affect societies and nations. These changes beget security risks.

As you know, national security involves much more than guns and military strength. The national security diagram consists of political, military, cultural and economic elements. These elements overlap, to one degree or another, and every major issue in the international arena contains all of them. We risk our security when we don't consider the full range of these issues. And climate change has an impact on each of them. This will

be particularly true in the world's most volatile regions, where environmental and natural resource challenges have added greatly to the existing political, economic and cultural tensions. The instabilities that result now create fertile ground for extremism – and these instabilities are likely to be exacerbated by global climate change.

When we add it up, our view is that global climate change yields a group of challenges with which we've not grappled in a systematic way.

I request that our full report be included in the record of this hearing, so I will very quickly summarize our key findings.

- Projected climate change poses a serious threat to America's national security.
- Climate change acts as a threat multiplier for instability in some of the most volatile regions of the world.
- Projected climate change will add to tensions even in stable regions of the world.
- Climate change, national security and energy dependence are a related set of global challenges.

I know General Wald will offer some rich detail on these findings and will note our recommendations, and Admiral Trully will touch on the ways in which climate change will affect military commanders moving forward. With my remaining time, I'd like to make three quick observations.

The first is to highlight that link between climate change and energy security. One can describe our current energy supply as finite, foreign and fickle. Continued pursuit of overseas energy supplies, and our addiction to them, cause a great loss of leverage in the international arena. Ironically, a focus on climate change may actually help us on this count. Key elements of the solution set for climate change are the same ones we would use to gain energy security. Focusing on climate is not a distraction from our current challenges; it may actually help us identify solutions.

Second, this issue is one that the US alone cannot solve. If we in our nation do everything right – assuming we know what is right – the hazards of global climate change would not be solved. China and India are integral to the global solution, but we cannot use this as an excuse for inaction. We must instead engage them – on many fronts. Many issues of great importance to our world will not get solved without US and Chinese cooperation. Not talking to the Chinese about climate change is not a useful option.

My third point: For military leaders, the first responsibility is to fight the right war, at the right time, at the right place. The highest and best form of victory for one's nation involves meeting the objectives without actually having to resort to conflict. It's a process of trumping the battle, if you will. It takes a great deal of planning, strategy, resources and moral courage, but that is the higher art form for a servant of the nation.

That seems to be a reasonable way to think about climate and security. There are a great many risks associated with climate change, and the costs are uncertain. But if we start

planning and working now, we may be able to meet our security objectives, and mitigate some of those battles.

The potential and adverse effects of climate change could make current changes seem small. Facing and sorting these challenges, for our nation's leaders, can be daunting. It will require vision, proactivity, courage and thoughtful articulation. What we cannot do is wait.

I'm most grateful that this Committee is considering this issue.

Thank you.