

Vandenberg Air Force Base: local and global connections

Andrew Lichterman, talk delivered at the Global Network against Weapons and Nuclear Power in Space annual meeting, March 15, 2014, Santa Barbara, California

I would like to begin by expressing my appreciation for the work of the Global Network Against Weapons and Nuclear Power in Space, still going after more than two decades.

Amidst the triumphalism of the post-Cold War period, the Global Network reminded people that high-tech arms racing never stopped. In times of low political mobilization when much disarmament activity became narrowly single issue, technical, and professionalized, they have continued to find new ways to connect disarmament work to broader struggles for a fair and ecologically sustainable global society. All of this is of particular importance in the current moment.

I was asked to talk about Vandenberg Air Force Base and what goes on there, so I will start with that, and then I will talk a bit about the significance of the activities at Vandenberg in the coming years, and of the importance of placing all of this in the broader context of a world that seems headed towards a new round of intensified great power competition and conflict.

Vandenberg Air Force Base is best known as the place where the U.S. tests intercontinental ballistic missiles and tests missile defense systems, but there is more to it. Vandenberg plays a significant role in U.S. military operations world-wide, as well as in maintaining the current generation of strategic weapons and developing the next.

Vandenberg is the headquarters for one of the two U.S. missile and rocket ranges, the other centered at Cape Canaveral, Florida. It was chosen for this purpose because satellites could be launched into polar orbit without passing over land and missiles could be launched over open water towards target sites, including U.S.-occupied islands in the Pacific.

Converted to a missile launch site in 1957, Vandenberg was the home of the first U.S. nuclear-armed intercontinental ballistic missile (ICBM), the Atlas. Many of its successors, from the Titan to the Minuteman and the MX “Peacekeeper,” were tested at Vandenberg during their development. Over 1800 missile and orbital rocket launches have taken place there.

Over decades as a satellite launch facility, missile base, and test site, Vandenberg developed an extensive array of ground facilities for tracking missiles and controlling satellites. Today, Vandenberg is the headquarters of the 14th Air Force, the command responsible for providing many space services to the rest of the military. From Vandenberg and other bases and tracking stations in the U.S. and around the world, the 14th Air Force operates satellites that provide surveillance, communications, global positioning data, and weather information to the military.

The Joint Space Operations Center at Vandenberg does day to day planning of space missions, drafting tasking orders for the positioning and use of satellites. As one of the main launch sites for satellites and a coordinating facility for satellite tracking and control, Vandenberg constitutes a key element in a global space surveillance and communications network that virtually all elements of the U.S. military use in everyday operations. Deputy Under Secretary of the Air Force for Space Programs Gary Payton told a House committee in 2010,

“Our users stretch from the Oval Office to the mountains of Afghanistan. Using protected, wideband, or narrowband communications, the President can command the nation’s nuclear forces, our UAV pilots can fly Predators over Iraq and Afghanistan from the United States, and Special Forces teams can call for exfiltration or tactical air support.”¹

Missile defense testing also takes place at Vandenberg, and operational missile defense interceptor missiles are now deployed there. Missile defenses will be dependent on an increasingly sophisticated array of satellites to detect launches and coordinate missile defense launches. Vandenberg I likely will continue to play a leading role in all phases of missile defense, from testing ground and space-based technologies to launching parts of the satellite constellations that missile defense would require.

Minuteman ICBM’s, now the only land-based U.S. nuclear strategic missiles, are routinely flight tested from Vandenberg. The Minuteman is being modernized and the Air Force already has begun planning for the next generation of land-based strategic weapons. Whether they choose upgraded versions of the Minuteman or a new missile, it likely will be tested at Vandenberg.

The U.S. is hoping to take advantage of continuing advances in space technologies and improvements in guidance technologies to place non-nuclear as well as nuclear payloads on long range missiles. The goal is to achieve “prompt global strike,” the ability to hit targets anywhere on earth in a few hours or less from the decision to attack, and to hit them accurately enough so that non-nuclear payloads can destroy the target.

In addition to long range ballistic missiles with non-nuclear payloads, the U.S. is researching new kinds of weapons, including gliding, maneuvering reentry vehicles that could carry a variety of weapons. Tests of hypersonic vehicles that are part of this R&D effort have been launched in recent years from Vandenberg.

There are significant technical obstacles to developing missiles and reentry vehicles sufficiently accurate to make conventional “prompt global strike” weapons practical. But many of the technologies being researched, such as advances in guidance systems and hypersonic flight, could be applied to the next generation of nuclear delivery systems as well. The possibility that the “prompt global strike” program might succeed also impedes nuclear disarmament efforts, and could help to accelerate a new round of arms racing.

For those of you who are from the Los Angeles area, I want to say a few words about one of your local military facilities that has close ties to Vandenberg. Many of the programs that result in launches at Vandenberg are conceived and managed at the Space and Missile Systems Center at Los Angeles Base in El Segundo.

The Space and Missile Systems Center is an extensive research and administrative complex whose growth has since the early days of the Cold War been intertwined with that of the Southern California aerospace industry, located close to the facilities of companies like TRW and the Aerospace Corporation. Los Angeles Air Force Base is home to a variety of other space units, ranging from the directorates that manage infrared, military communications, and global positioning satellites to the defense weather systems directorate. Today, as its web site states, the Space and Missile Systems Center is “the Air Force's command center for researching,

developing, acquiring and launching military space systems.”

Given the direction that both the U.S. military and the world is going, both Vandenberg and the Space and Missile Systems Center are likely to get plenty of work in the coming years. The budget proposals recently submitted to Congress and other recent Defense Department policy documents show a continued commitment to nuclear weapons and to the modernization of U.S. nuclear forces. The Joint Chiefs of Staff statement accompanying the QDR declares keeping a “safe and secure nuclear deterrent” first in its list of 12 mission priorities for the military.² The U.S. plans to modernize all three legs of the nuclear “triad.” new nuclear submarines, long-range nuclear capable bombers, and concepts to modernize or replace the Minuteman III intercontinental ballistic missile all are on the drawing board. Modernizing the U.S. nuclear arsenal and the facilities that support it is expected to cost as much as \$200 billion over the next decade, and estimates of the cost of maintaining and modernizing U.S. nuclear forces and the nuclear weapons complex over the next 30 years run as high as a trillion dollars.³

Considering these immense costs, it is likely that some of the more ambitious and expensive concepts under consideration, like an entirely new ICBM, may never be pursued.

It is clear, however, that the military establishment aims to reshape its forces, moving from those fit for long wars of occupation and counterinsurgency to those that fit a new round of competition with other powers that have large, high-tech militaries and nuclear weapons.

In a speech outlining the FY 2015 budget proposal, Secretary of Defense Chuck Hagel stated that “after Iraq and Afghanistan, we are no longer sizing the military to conduct long and large stability operations,” and that “we must maintain our technological edge over potential adversaries.” “Accordingly,” said Hagel, “our recommendations favor a smaller and more capable force – putting a premium on rapidly deployable, self-sustaining platforms that can defeat more technologically advanced adversaries. We also preserved all three legs of the nuclear triad and will make important investments to preserve a safe, secure, reliable, and effective nuclear force.” He noted that “the forces we prioritized can project power over great distances” and that they are “well-suited to the strategy’s rebalance to the Asia-Pacific region, to sustaining security commitments in the Middle East and Europe, and our engagement in other regions.”⁴

All of this suggests we can expect a new round of arms racing, one that arguably is more dangerous and complex than that we saw in the Cold War. There will be a new mix of weapons that brings with it new interactions, with modernized nuclear weapons, more advanced missile defenses, a wide range of powerful accurate non-nuclear weapons and stealthy delivery systems, and cyberwarfare. With the increased dependence of militaries, and particularly of the U.S. on satellites for a wide range of military functions, we also can expect intensified military competition in space.

The events in and around the Ukraine in recent weeks should give us pause for a variety of reasons. They manifest how dangerous the existence of vast, high-tech militaries backed by nuclear weapons remains.

The historian Sandra Halperin wrote that

“In Europe, the maldistribution of taxes and income and the monopolization of economic resources and opportunities created a social structure of accumulation that was so distorted from a welfare point of view that it ran into ever-recurring bottlenecks and became socially and politically intolerable. By 1914, monopoly, poor use of resources, maldistribution of income, and inequitable tax systems had combined to produce a crisis in Europe.” Sandra Halperin, *War and Social Change in Modern Europe: The Great Transformation Revisited* (Cambridge: Cambridge University Press, 2004), pp.267-268.

That sounds to me like a description of the whole world today.

We need a new way of talking about all this—one that recognizes fully that today there is no democracy anywhere, that we have an economy that is starkly two tier and growing more inequitable all the time, that decisions about war and peace in every country on earth are made by tiny elites who are largely unaccountable, and that the vast majority of humanity, and the planet itself, has no voice.

I want to close with a tale of two e-mail lists. I am on one list that is a general anti-war list, and on another that is a nuclear disarmament list. The anti-war list has been focused on the actions of contending state elites, with long debates over which country or countries bears what portion of the blame in the Ukraine crisis: The United States? The EU? NATO? Russia?

It often sounds like we are choosing up sides, backing one state or another. There is extensive debate over the detail and import of each military maneuver or covert intervention. There is relatively little discussion in this context of the continuing effects of the global economic crisis, of its exploitation by financial elites to impose austerity politics that have redistributed wealth radically upward. There is little comment on the fact that all of this has created the kinds of conditions that make the populations of poor, weak countries more susceptible to extremist nationalisms, and to manipulation by the elites who control the great powers around them.

Those conditions too should remind us of the last century, and how its devastating world wars began. The key to every war is the ability of elites who control governments and command militaries to set us against one another. Our main goal must be to prevent this from happening again.

On the disarmament list, there has been a discussion about how much we should try to highlight the fact that many of the contending powers involved in the Ukraine crisis are nuclear-armed.

One participant argued that this would be like “crying wolf,” because it was very unlikely that any of the nuclear-armed countries would go to war over the Ukraine, and even less likely they would use nuclear weapons. The fact that much of the public has no idea that the militaries now edging towards confrontation are backed by nuclear weapons and that we have no clear idea about how to talk about nuclear weapons amidst this kind of crisis, is a symptom of how separated nuclear disarmament discourse has become from any broader discussion and understanding of the forces that might actually cause wars in the current moment.

And for those who think they know for sure what might cause wars in an era of stark inequality, widespread social unrest, and rising and declining great power elites, one might consider what Eric Hobsbawm said about the beginning of World War I:

“...[W]hat gave the period its peculiar tone and savour was that the coming cataclysms were both expected, misunderstood and disbelieved. World war would come, but nobody, even the best of the prophets, really understood the kind of war it would be. And when the world finally stood on the brink, the decision-makers rushed towards the abyss in utter disbelief.”⁵

We are now half the duration of the Cold War past the Cold War. We need a peace and disarmament discourse clearly focused on the dynamics driving great power conflicts today and the catastrophic dangers posed by nuclear weapons in the context of great power war. That is where the greatest dangers still lie, not in the supposed “threats” posed by nuclear weapons that don’t exist— “terrorist” nuclear weapons, or those that the target “rogue state” du jour might somehow acquire. And we need to connect the continued brandishing of nuclear weapons to people’s everyday lives, and to their sense of what is fair and right, by showing the ways in which they are the ultimate example of an order of things where a fraction of humanity determines the fate of the whole, where the few reap the benefits while all bear the risk.

¹ Statement of Gary E. Payton, Deputy Under Secretary of the Air Force for Space Programs, Senate Armed Services Committee, Subcommittee on Strategic Forces, March 10, 2010.

² 2014 Quadrennial Defense Review, Chairman’s Assessment of the Quadrennial Defense Review p.60.

³ Hans M. Kristensen and Robert S. Norris, “US nuclear forces, 2014,” *Bulletin of the Atomic Scientists* 2014 70: 85,88; Jon B. Wolfsthal, Jeffrey Lewis, and Narc Quint, *The Trillion Dollar Triad: U.S. Strategic Modernization over the Next Thirty Years* (Monterey, CA, 2014: The James Martin Center for Nonproliferation Studies) p.4.

⁴ Secretary of Defense Chuck Hagel, Speech, “FY15 Budget Preview,” Monday, February 24, 2014, <http://www.defense.gov/Speeches/Speech.aspx?SpeechID=1831>, accessed 2-25-14

5. Eric Hobsbawm, *The Age of Empire: 1875-1914*, (Vintage Books, New York: 1989), p.10.