Vandenberg Air Force Base: Where the Present and Future of U.S. Warmaking Come Together

Vandenberg Space Operations: Already at War

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 key role in U.S. military operations world-wide, as well as in maintaining the current generation of strategic weapons and developing the next.

Vandenberg Air Force Base occupies nearly 100,000 acres, stretching along thirty-five miles of the Central California coast. It is the headquarters for one of the two U.S. missile and rocket ranges, the other centered at Cape Canaveral, Florida. Vandenberg 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. In all, over 1850 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. Forces on the ground receive satellite-produced intelligence and weather reports via satellite communications, and navigate and target weapons using satellite-generated global positioning (GPS) signals. Shortly before the Iraq war began, Pentagon Briefer Major General Frank J. Blaisdell told the press that “we are so dominant in space that I pity a country that would come up against us.” The Air Force Space Command 2004-2005 Almanac proclaimed that military space applications in the Iraq war included “Global Positioning System-guided bombs; GPS navigation for ground forces; missile warning from Defense Support Program satellites; and communications fed by military satellites communications systems.”

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

Kwajalein and the Marshall Islands: Ground Zero for U.S. Testing

After spending decades of my life trying to persuade the US government to take responsibility for the full range of damages and injuries caused by the testing of 67 atmospheric atomic and thermonuclear weapons in the Marshall Islands, a new global arms system arrived at the door of the Marshall Islands. After years of ICBM testing, the Marshall Islands now has the dubious distinction of hosting the US government’s missile shield testing program. The US government shoots Intercontinental Ballistic Missiles (ICBMs) at the Marshall Islands. From an area leased by the US Army on Kwajalein Atoll, the Ronald Reagan Missile Defense Test Site, the US launches interceptor missiles at the incoming ICBMs to test the ability of these interceptors to track and destroy incoming missiles. These tests impact every aspect of our lives…from the local people who are relocated from their homes, to the whales, sea turtles, and birds that have lived in harmony with human beings in our region of the world for centuries. Statement of Marshall Islands resident Tony de Brum to the 2005 Nuclear Non-Proliferation Treaty Review Conference, May 2005

When the Air Force launches a test ICBM and its dummy warheads from Vandenberg, Kwajalein atoll in the Marshall Islands is likely to be the target. Nuclear tests at other locations in the Marshall Islands during the 1950’s included hydrogen bomb explosions with yields in the megatons. These tests contaminated both the land and the inhabitants, and both nuclear testing and continued U.S. military activities have resulted in the forced removal of the local people from their ancestral homes. Like Vandenberg, Kwajalein has become a multi-purpose facility, its radars and other instrumentation supporting a variety of missile defense interceptor launches and other military tests.
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 have come to depend on. As 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.”

Missile Defense

Vandenberg plays multiple roles in the ground-based mid course interceptor element of missile defense. Test interceptors for the program have been launched from Vandenberg, with target missiles fired from Kwajalein in the Marshall Islands. (see box). The first round of operational interceptor missiles has been installed at Vandenberg and at Fort Greeley, Alaska. Vandenberg has four of the initial thirty interceptors. Ground based mid-course interceptors like those at Vandenberg are only a small part of the ambitious U.S. missile defense effort, which is exploring a variety of technologies to destroy missiles in the boost phase, in space, and after re-entry into the atmosphere. Additional interceptors already are being deployed aboard Navy ships.

Missile defenses will be dependent on an increasingly sophisticated array of satellites to detect launches and coordinate the weapons used to shoot missiles down. Vandenberg is likely 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.

Strategic Weapons: From the Cold War to “Global Strike”

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. The U.S. is hoping to take advantage of continuing advances in aerospace and 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. In addition to long range missiles, the U.S. is researching new kinds of weapons with global reach, including gliding, maneuvering reentry vehicles that could carry a variety of weapons and that could be delivered by missile.

Some of these new missiles and launch vehicles likely will be flight tested at Vandenberg. But in addition, Vandenberg is being considered as a possible site for the operational deployment of non-nuclear long range missiles or launch vehicles, both because they could be launched over water and to avoid confusion with nuclear missile launches from existing ICBM silos in the central United States. Although these new long-range delivery systems supposedly will not carry nuclear weapons, many of the technologies being researched, from propulsion to guidance systems to advances in hypersonic flight, can be used to deliver nuclear weapons equally well.

After slowing down for a few years after the collapse of the Soviet Union, the pace of U.S. weapons research quickened again in the new century, fueled in part by two wars. With little public debate, we have resumed a kind of arms race, one that may be considerably more complex, both in the number of participants and in the range and interaction of technologies, than the dangerous first half century of the nuclear age. There can be no doubt who is leading this arms race: the United States, with a military budget nearly as big as the rest of the world put combined and a policy and practice of preventive war. Those in power have bet all our futures on a strategy of permanent military dominance. Vandenberg Air Force Base stands at its leading edge.