

## STOCKPILE NEAR URBAN CENTER: NELLIS AIR FORCE BASE, NEVADA

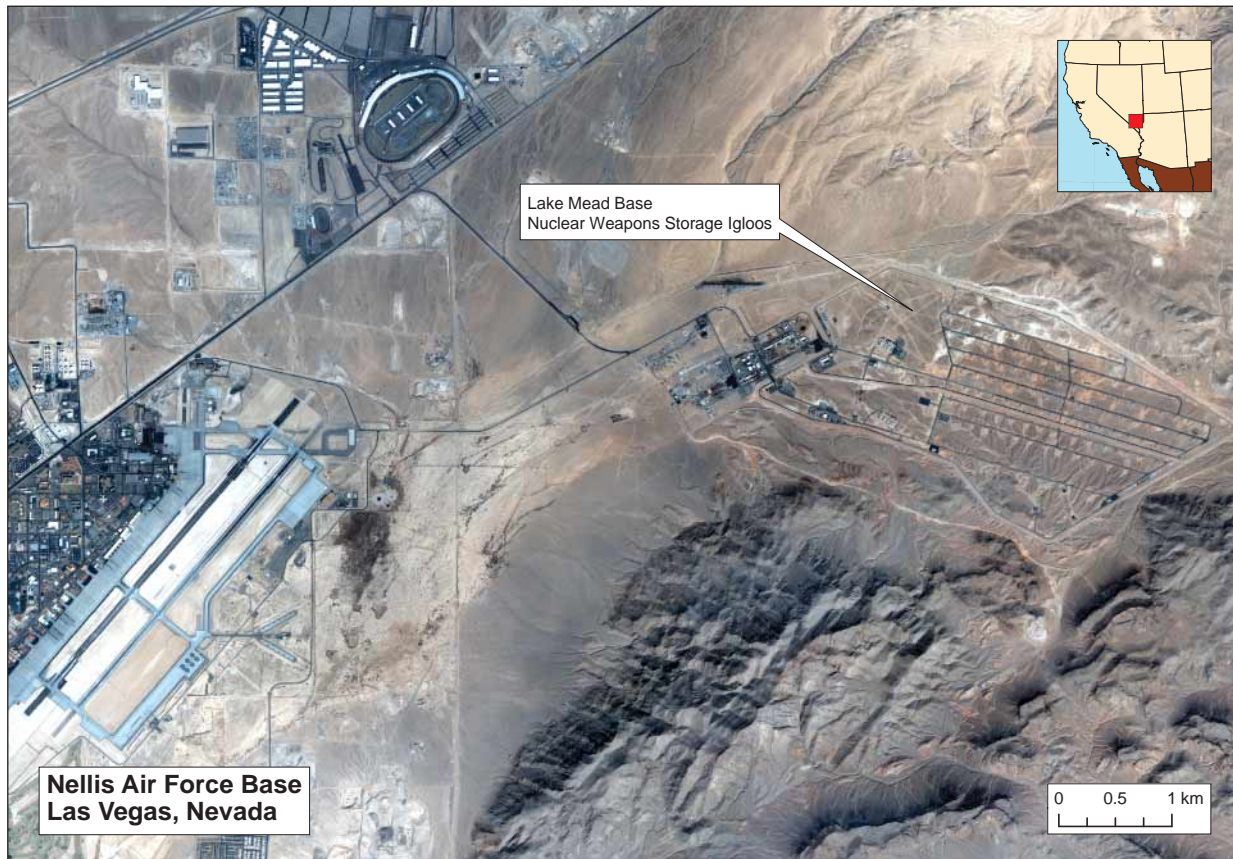
In June 2004, the Bush administration announced that it would reduce the nuclear stockpile from the current level of 10,000 warheads to approximately 6,000 by 2012. While these reductions are a positive step, an arsenal of 6,000 weapons is still many times larger than what is sufficient to fulfill the limited role of deterrence. Thousands of these weapons will remain on high alert, while the rest will still be stored at bases, some of which are near major urban centers.

Nellis Air Force Base, north of Las Vegas, serves as one of two main Air Force nuclear weapons general depots in the United States (the other is at Kirtland Air Force Base in New Mexico—see above). Nuclear weapons are stored at the Nellis Area 2 (formerly Lake Mead Base) at a remote section of the Nellis

complex. They are overseen by the 896th Munitions Squadron, a unit of the Air Force Materiel Command, though the nuclear facility is operated jointly for the Air Force Materiel Command and the Air Combat Command.

Well over 1,000 nuclear warheads of several types are stored at Nellis, including the B61-4, B61-7, and B83-1 bombs. There are also W80-1 warheads from air-launched cruise missiles.

The satellite photo of Nellis Air Force Base and the Lake Mead Base was acquired on March 22, 2002. The circular structure in the northern end of the image is the Las Vegas Motor Speedway, a NASCAR racetrack where more than 100,000 fans gather just four miles away from nuclear weapons.



## HIGH ALERT LEVELS: NAVAL SUBMARINE BASE KINGS BAY, GEORGIA

The U.S. nuclear strike plans form a directive of what weapons must be deployed. For every target identified in the plan, a warhead must be available and assigned to hit it at all times—regardless of our current relationship with Russia or the other identified countries. Since the Bush administration's nuclear weapons policies call for expanding the list of potential targets, the number of weapons on high alert will expand as well. This means a significant number of weapons will be deployed with active forces.

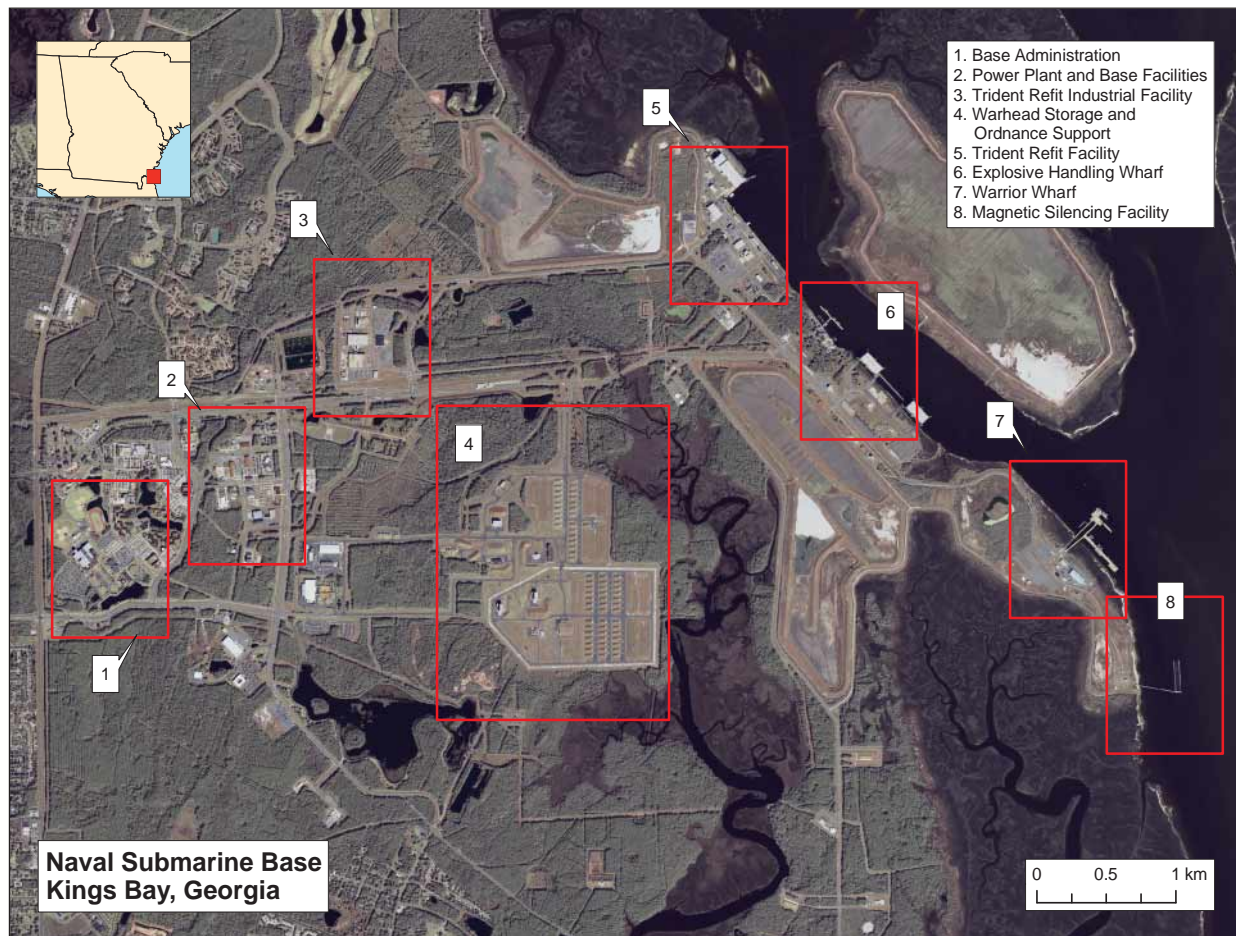
There are already 1,500 nuclear warheads assigned to the Naval Submarine Base Kings Bay, Georgia, near Jacksonville, Florida. The base is the homeport for the Navy's Atlantic-based Trident II-equipped (Ohio class) ballistic missile submarine force.

The Strategic Weapons Facility Atlantic is responsible for storage, handling, and maintenance of nuclear weapons at Kings Bay. Because the number of manufactured W88 Trident II warheads was not sufficient to arm the original 10 Trident II-capable submarines,

W76 Trident I warheads from retired Atlantic fleet Poseidon submarines arm the force as well. There are also W80-0 warheads for sea-launched cruise missiles that could be redeployed on attack submarines.

The satellite photo of Kings Bay Naval Submarine Base was taken by the DigitalGlobe Corporation's QuickBird satellite on October 23, 2003. The training and base administration facilities stand in the western section of the naval base. Industrial and missile/warhead storage are located in the central portion of the base, and the piers are some 5 kilometers east of the base entrance. No submarines are visible in the satellite photo, but likely there are several submarines within the covered refit dry dock or explosive-handling wharf.

The base is home to 42 nuclear weapons storage vaults. They presumably lie within a double-fence enclosure that also houses the vertical-missile packaging buildings where warheads are mounted atop missiles. In the satellite photo, a single 18-foot-long white truck is parked in front of one of the warhead storage vaults.



## MISGIVINGS OVER MISSILE DEFENSE: FORT GREELY, ALASKA

Later this year, the Bush administration is planning to declare that interceptor missiles at Fort Greely, Alaska, are operational, despite the fact that critics inside and outside the government have raised fundamental questions about the technical capabilities of the program. It has not been adequately tested, and some critics say that simply deploying the missile defense system will spur other nations to build enough weapons to overwhelm it. Nonetheless, the administration is moving forward with its missile defense plans.

Construction of the silos at Fort Greely began in July 2002, following the demise of the Anti-Ballistic Missile Treaty. The silos will house interceptor missiles for the U.S. ground-based, midcourse national missile defense system designed to shoot down ballistic missiles that North Korea might deploy sometime in the future. Under current plans, 20 interceptors will be in place at Vandenberg Air Force Base in California and at Fort Greely by the end of 2005.

The satellite photo of Fort Greely was taken on July 24, 2003. It shows the construction site for the defense system as 1.57 square kilometers in area. The complex includes launch silos; an interceptor receiving and processing facility; interceptor storage facilities; headquarters; a silo interface vault; a mechanical/electrical equipment building; an administration and maintenance facility; a backup power generator with fuel storage; security (fencing, lighting, monitoring equipment); sewage treatment (septic field); a steam plant; a substation; a readiness station; a security building; an entry control station; a fuel unloading facility, and a water supply facility.



## OUTSIDE OUR BORDERS: AVIANO AIR BASE, ITALY

The United States is the only nation that has nuclear weapons deployed outside its borders. For instance, U.S. nuclear weapons are currently deployed to two air bases in Italy: Aviano in the north and Ghedi-Torre, an Italian base on the Adriatic coast.

With the closure of U.S. operations at Torrejon in Spain in 1992, the 401st Tactical Fighter Wing moved to Aviano and was redesignated the 31st Fighter Wing in April 1994. Two F-16 fighter squadrons (the 510th and the 555th) moved to Aviano from Ramstein Air Base in Germany to permanently equip the wing. Headquarters for the 16th Air Force, also at Aviano, is responsible for the southern region of NATO and the Mediterranean.

Nuclear weapons have been stored at Aviano since at least the late 1950s. They were initially stored at a secluded weapons storage area known as Area D. Weapons storage and security system vaults in selected hangars achieved initial operational capability in January 1996, supplementing Area D. The sole type of nuclear weapon there today is the B61 bomb. We estimate that approximately 50 bombs are housed in Aviano's 18 vaults.

The photograph of Aviano Air Base was taken by DigitalGlobe's QuickBird satellite on October 15, 2003. This central, fenced portion of the base occupies about 5 square kilometers in area. Groups of protective aircraft shelters—51 shelters in all—border a single 3,200-meter runway. Three 400-square-meter hangars sit at the northern end of the base adjacent to the runway. Eleven F-16 aircraft can be seen in this satellite photograph: five in aircraft parking areas at the southwest end of the runway and six farther from the runway near protective aircraft shelters.



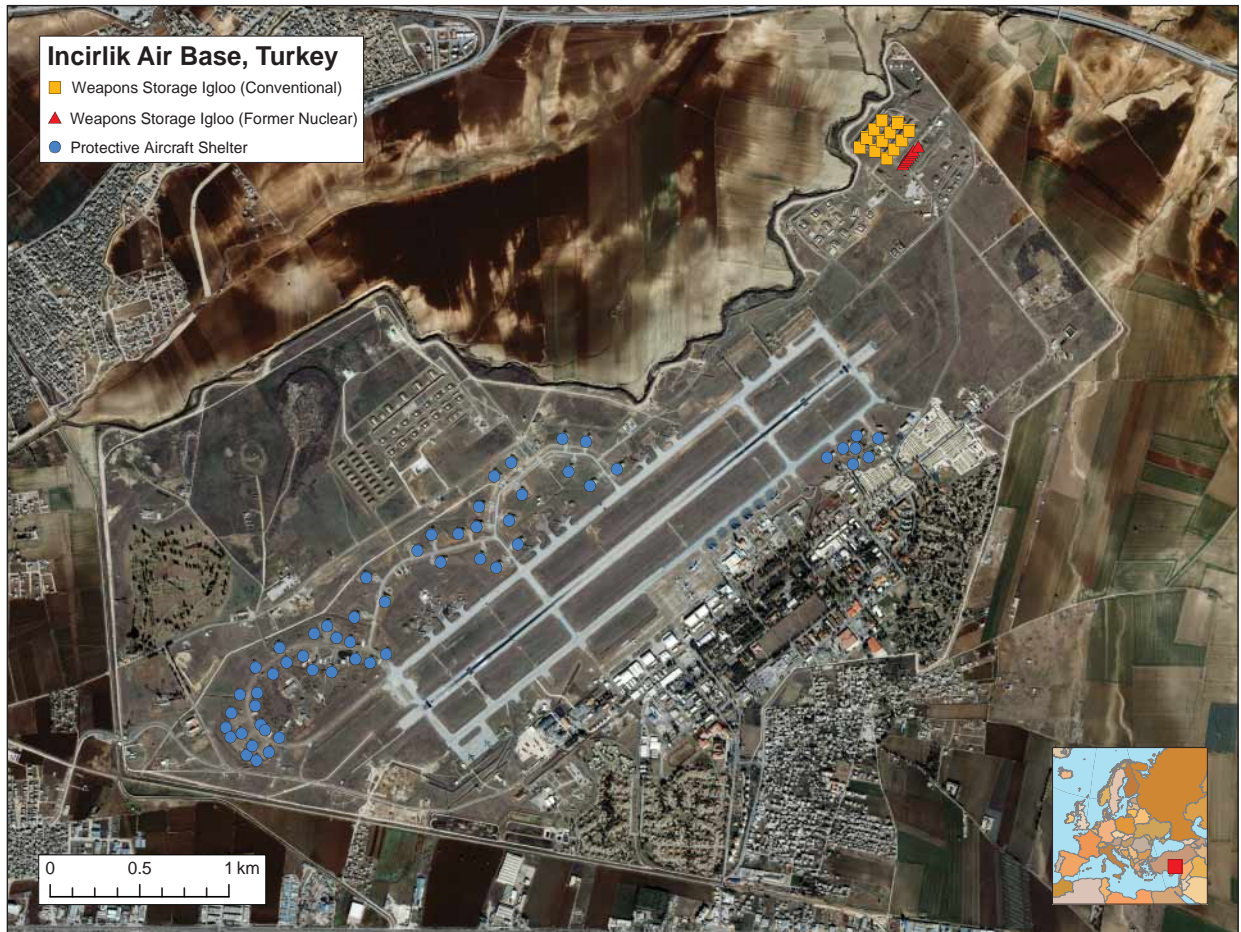
## ALLIES IN HARM'S WAY: INCIRLIK AIR BASE, TURKEY

When the United States deploys nuclear weapons in other countries, these nations become potential targets of attack. During the Cold War, the United States had nuclear weapons in 18 countries, making each of them a target for Soviet missiles. Now the United States houses nuclear weapons in just six European countries, but the collapse of the Soviet Union has not assuaged fears of being targeted. Greece recently asked the United States to remove all of its nuclear weapons from Greek bases. This decision could create a domino effect as other allies consider the high cost of storing American nuclear weapons on their soil.

Meantime, Incirlik Air Base, located seven miles east of the city of Adana on the northern Mediterranean coast, remains the sole storage location for nuclear weapons in Turkey. The 39th Wing is the host and nuclear custodian at Incirlik. Twenty-five weapons storage and security system vaults are operational at Incirlik.

The satellite photo of Incirlik Air Base was acquired on December 13, 2002, by the Space Imaging Corporation's Ikonos satellite. The air base is approximately 13.3 square kilometers in area, with one 3,350-meter runway. Several dozen aircraft are visible in the image: F-16 fighter aircraft, B-52 bombers, helicopters, and large transport aircraft. Vehicles and off-loaded containers can be seen in and around the ordnance storage areas. In addition to the base's housing structures, a tent city comprising over 100 temporary living quarters has been constructed at the northeast end of Incirlik. This activity at Incirlik, evident in the satellite photo, shows preparations for Operation Iraqi Freedom, which was launched three months later.

A total of 56 protective aircraft shelters are situated adjacent to the main runway. These shelters are of three kinds, and include a type with conical, wooden-framed doors that were also evident at Aviano, which may be where the weapons storage and security system vaults are located.

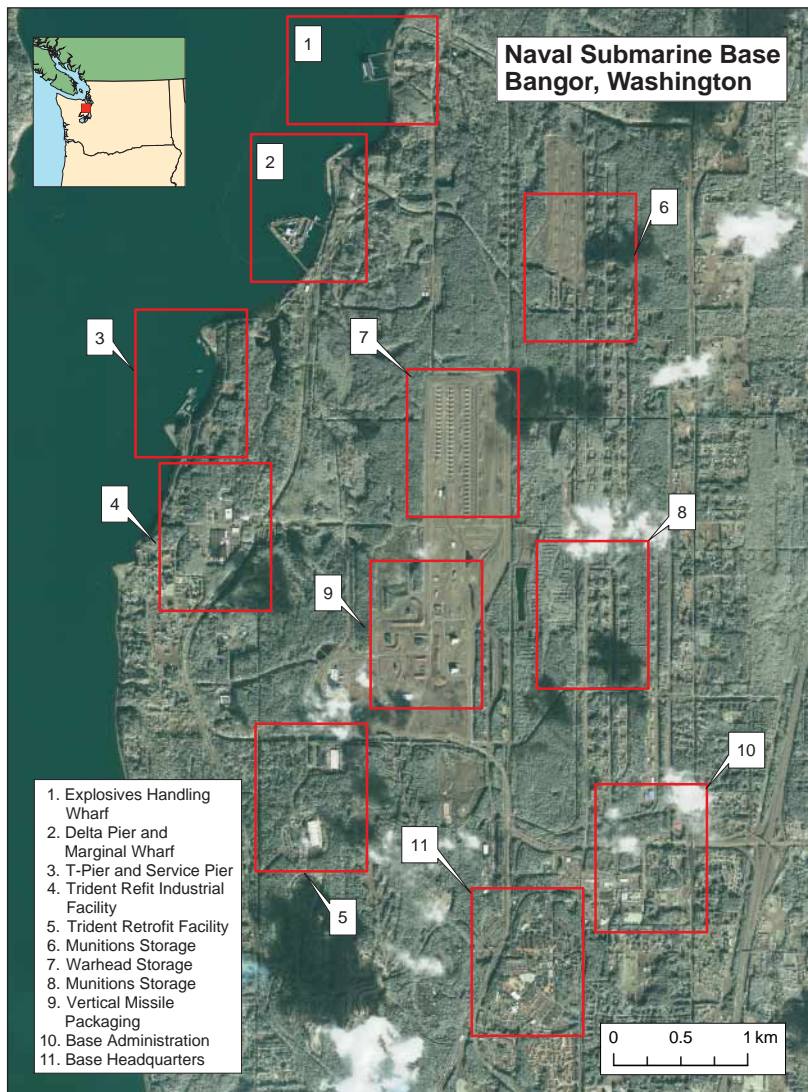


## STILL FIGHTING THE COLD WAR: NAVAL SUBMARINE BASE BANGOR, WASHINGTON

At any given time, a half dozen or more U.S. ballistic missile submarines patrol Atlantic and Pacific waters. The U.S. nuclear war plan requires that their warheads cover designated targets at all times, regardless of the altered relationship with Russia. Thus, the submarines are maintained at high levels of alert approaching the tempo of the Cold War. This operational level is excessive and could be relaxed with no loss of security.

The Pacific patrols are based at Naval Submarine Base Bangor located near Seattle on the Hood Canal. Nuclear warheads supplying the Pacific-based Trident submarines are stored at the Strategic Weapons Facility Pacific in Silverdale, part of the Bangor complex. The base stores nuclear warheads for the three or four submarines that are in port or overhaul at any given time. There are probably around 1,500 warheads assigned to the base, though a portion is always at sea on submarines on patrol. Until recently, only W76 warheads were stored at Bangor, but beginning in 2002, the number of W88 warheads has increased as Trident II missiles are back-fitted onto older submarines. There are also W80-0 warheads for sea-launched cruise missiles that could be re-deployed on attack submarines.

The photograph of Naval Submarine Base Bangor was taken on October 23, 2003, by the DigitalGlobe Corporation's QuickBird satellite. According to its website, the Bangor base occupies 7,201 acres or 29.1 square kilometers. The satellite image captures approximately 41 square kilometers of land—presumably most of the base (1 sq km = 247.105381 acres). Facilities at the naval base include piers and wharfs; industrial facilities servicing the submarines, missiles and warheads; and base administration, training, and housing. Three submarines are visible in the image.



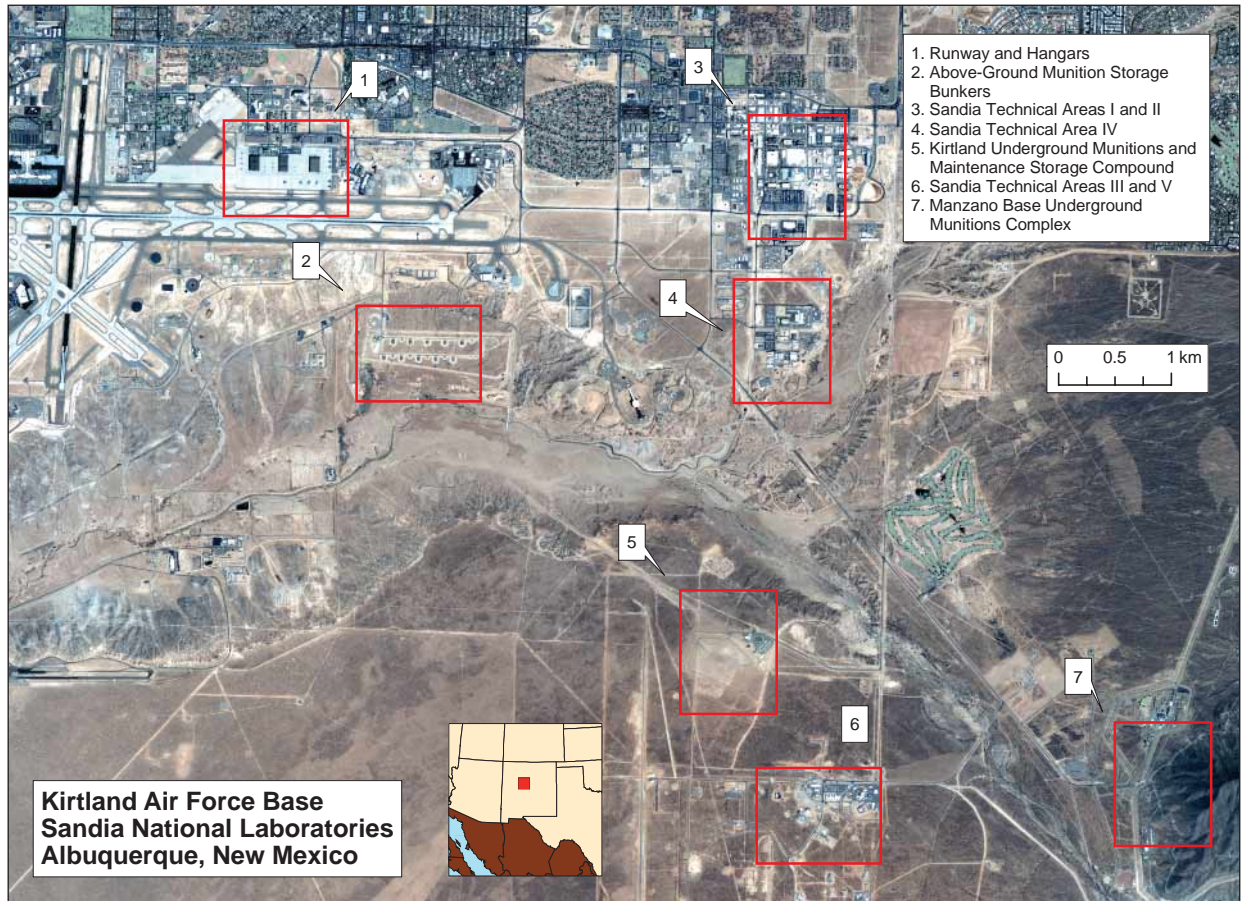
## EXCESSIVE ARSENALS: KIRTLAND AIR FORCE BASE, NEW MEXICO

Publicly, the Bush administration has pledged to reduce the nuclear arsenal to a level of 1,700 to 2,200 “operationally deployed strategic weapons.” Yet the operationally deployed weapons are only the visible portion of a huge, hidden arsenal. Approximately 7,000 warheads are currently deployed with active forces, and 3,000 additional reserve or inactive warheads in storage. Regardless of the alert levels, the U.S. arsenal will still total more than 6,000 warheads even after the administration’s proposed stockpile retirements are complete in 2012.

Kirtland Air Force Base serves as one of two main Air Force nuclear-weapons general depots in the United States. Because of its proximity to the Pantex Plant in Amarillo, Texas, where nuclear warheads are taken apart, Kirtland serves as a transshipment point to and from operational bases and storage sites. Nuclear weapons are stored in the recently built Kirtland Underground Munitions Storage Complex. The types of bombs and warheads include B61-4, B61-7, B61-11, B83-0, W84-0, W87-0, and W62-0.

Kirtland has been the U.S. military center for nuclear weapons administration and operation since during the Cold War. The current 56-acre Kirtland Underground Munitions Storage Complex was completed in 1994, consolidating warhead storage in a new facility outside Manzano Mountain. The complex is located on the southeast side of the installation, approximately 3.5 miles east of the main base. Nuclear weapons moved by air in and out of the Kirtland complex use the Albuquerque International Airport.

The satellite photo of Kirtland/Sandia was acquired by the DigitalGlobe Corporation’s QuickBird satellite on August 4, 2003. This clear image provides a view of the Manzano and Kirtland Underground Munitions Storage Complex facilities, as well as Sandia National Laboratories buildings. Albuquerque International Airport lies in the northwestern corner of the satellite photo. Two sections of the Kirtland base with aircraft can be seen in the photo: one area with large military transport aircraft and helicopters, and a second area with fighter aircraft (11 visible in the image).



## WEAPONS ABROAD: KLEINE BROGEL AIR BASE, BELGIUM

There are approximately 480 B61 bombs at eight airbases in six European countries. In the 1990s, many bombs were returned to the United States and the nuclear mission at several NATO bases ended. All other remaining bombs should be withdrawn as well, including those at Kleine Brogel Air Base, Belgium.

Kleine Brogel is the original and only remaining U.S. nuclear storage site in Belgium. Today, Kleine Brogel is a 1,100-acre Belgian Air Force main operating base located near the city of Meeuen in the northeast part of the country. It is host to the USAF 10th Tactical Fighter Bomber Wing flying F-16 aircraft. The wing is home to four squadrons (Smaldeelen) of F-16s, including two nuclear-certified units.

The 52nd Munitions Support Squadron is made up of about 110 members and cares for the B61 nuclear

bombs stored in the weapons storage and security system vaults located within hardened aircraft shelters on the base. The vaults at Kleine Brogel reached initial operational capability on April 3, 1993, and 11 vaults are operational today.

The satellite photograph of Kleine Brogel Air Base was taken by the DigitalGlobe Corporation's QuickBird satellite on September 21, 2003. Two parallel runways are evident in the photo: one 3,200 meters and the other 2,800 meters in length. There are two sets of hardened aircraft shelters: 11 at the southwestern end of the runway and four at the northeastern end. The four aircraft shelters at the northeastern end of the runway are within a double-fence enclosure. No aircraft of any type are visible in this satellite image.

