

Nuclear Notebook

U.S. nuclear weapons, and especially the numbers stored at specific locations, is fraught with many uncertainties due to the highly classified nature of nuclear weapons information. Declassified documents, leaks, official statements, news reports, and conversations with current and former officials provide many clues, as do high-resolution satellite images of many of these facilities. Such images are available to anyone with a computer and internet access, thanks to Google Earth and commercial satellite imaging companies such as DigitalGlobe. This development introduces important new tools for research and advances citizen verification. The statistics contained in this article represent our best estimates, based on many years of closely following nuclear issues.

The nuclear weapons network shrank during the past decade, with the Pentagon removing nuclear

weapons from three states (California, Virginia, and South Dakota) and the size of the stockpile decreasing from about 12,500 warheads to nearly 10,000. Consolidation slowed considerably compared with the period between 1992 and 1997, when the Pentagon withdrew nuclear weapons from 10 states and several European bases, and the total stockpile decreased from 18,290 to 12,500 warheads. (For a detailed accounting of the location and distribution of U.S. nuclear weapons in the 1990s, see "Where the Bombs Are, 1992," Sep-

Locations of U.S. nuclear weapons overseas

Belgium Germany Italy Netherlands Turkey Britain

Where they were

Alaska* Canada Chichi Jima Cuba France Greece Greenland Guam Hawaii* Iwo Jima Japan (non-nuclear) Johnston Island Kwajalein Atoll Midway Islands Morocco Okinawa **Philippines** Puerto Rico South Korea Spain Taiwan

* Deployed prior to 1959 statehood

tember 1992 *Bulletin*; and "Where the Bombs Are, 1997," September/ October 1997 *Bulletin*.)

Approximately 62 percent of the current stockpile belongs to the air force and is stored at seven bases in the United States and eight bases in six European countries; the navy stores its weapons at two submarine bases, one on each coast. None of the other services possesses nuclear weapons.

The ballistic missile submarine base at Bangor, Washington, contains nearly 24 percent of the entire stockpile, or some 2,364 warheads, the largest contingent. The Bangor installation is home to a majority (nine) of the navy's nuclearpowered ballistic missile submarines and a large number of surplus W76 warheads that will eventually be retired and disassembled. Its counterpart on the Atlantic coast, Kings Bay Submarine Base in Georgia, is the thirdlargest contingent, with some 1,364 warheads. Each base stores ap-

proximately 150 nuclear sea-launched cruise missiles.

Minot Air Force Base (AFB) in North Dakota, with more than 800 bombs and cruise missiles for its B-52 bombers and more than 400 warheads for its Minuteman III intercontinental ballistic missile wing, has the largest number of active air force weapons. The other B-52 wing at Barksdale AFB in Louisiana has more than 900 warheads, and Whiteman AFB in Missouri has more than 130 bombs for its B-2 bombers.

The large underground facility at

Kirtland AFB in Albuquerque, New Mexico, stores more than 1,900 warheads that are either part of the inactive/ reserve stockpile or awaiting shipment across Interstate 40 to the Pantex Plant outside of Amarillo, Texas, for dismantlement. The 970-acre facility at Nellis AFB, Nevada, northeast of Las Vegas, performs a similar function, storing approximately 900 warheads in 75 igloos—"one of the largest stockpiles in the free world," according to the air force.

During the Cold War, the United States deployed a large percentage (up to one-third) of its nuclear weapons in other countries and at sea. At its peak arsenal size in the late 1960s, the United States stored weapons in 17 different countries. By the mid-1980s, there were about 14,000 weapons in 26 U.S. states, 6,000 more at overseas U.S. and NATO bases, and another 4,000 on ships at sea.

The United States terminated many nuclear missions after the end of the Cold War and retired the weapons. It withdrew all of its nuclear weapons from South Korea in 1991 and thousands more from Europe by 1993. The army and Marine Corps denuclearized in the early 1990s, and in 1992 the navy swiftly off-loaded all nuclear weapons from aircraft carriers and other surface vessels. By 1994, the navy had eliminated these ships' nuclear capability, and many air force, navy, and army bases and storage depots closed overseas as a result. Today, perhaps as many as 400 bombs remain at eight facilities in six European countries, the last remnant of a bygone era (see "U.S. Nuclear Weapons in Europe, 1954-2004," November/ December 2004 Bulletin). *

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