

Italy's Nuclear Anniversary: Fake Reassurance For a King's Ransom

Posted on Jun.30, 2014 in [NATO](#), [Nuclear Weapons](#), [United States](#) by [Hans M. Kristensen](#)



A new placard at Ghedi Air Base implies that U.S. nuclear weapons stored at the base have protected “the free nations of the world” after the end of the Cold War. But where is the evidence?

By Hans M. Kristensen

In December 1963, a shipment of U.S. nuclear bombs arrived at Ghedi Torre Air Base in northern Italy. Today, half a century later, the U.S. Air Force still deploys nuclear bombs at the base.

The U.S.-Italian nuclear collaboration [was celebrated](#) at the base in January. A placard credited the nuclear “NATO mission” at Ghedi with having “protected the free nations of the world....”

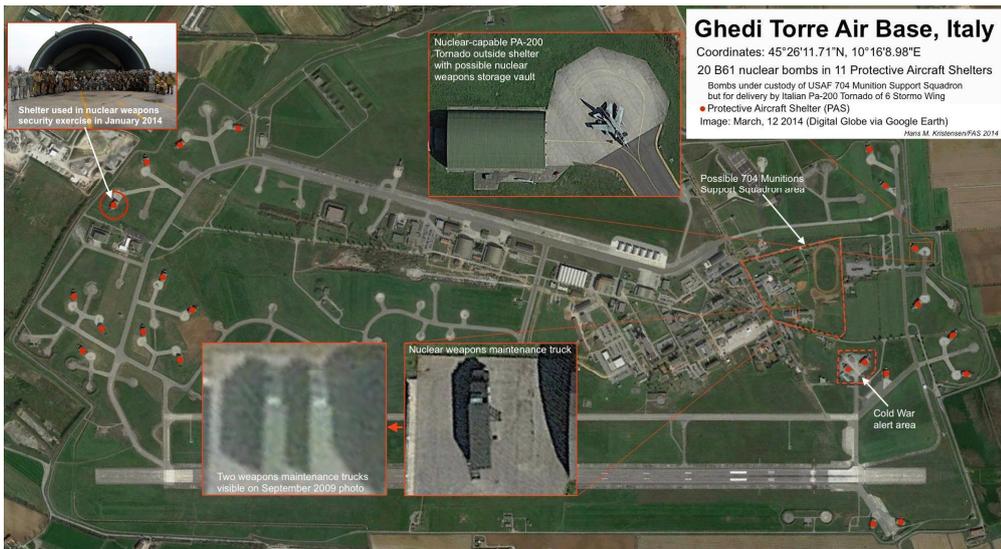
That might have been the case during the Cold War when NATO was faced with an imminent threat from the Soviet Union. But half of the nuclear tenure at Ghedi has been *after* the end of the Cold War with no imminent threat that requires forward deployment of nuclear weapons in Europe.

Instead, the nuclear NATO mission now appears to be a financial and political burden to NATO that robs its armed forces of money and time better spent on non-nuclear missions, muddles NATO’s nuclear arms control message, and provides fake reassurance to eastern NATO allies.

Italian Nuclear Anniversary

Neither the U.S. nor Italian government will confirm that there are nuclear weapons at Ghedi Torre Air Base. The anniversary placard doesn't even include the word "nuclear" but instead vaguely refers to the "NATO mission."

But there are numerous tell signs. One of the biggest is the presence of the 704th Munitions Support Squadron (MUNSS), a U.S. Air Force unit of approximately 134 personnel that is tasked with protecting and maintaining the 20 U.S. B61 nuclear bombs at the base. The MUNSS would not be at the base unless there were nuclear weapons present. There are only four MUNSS units in the U.S. Air Force and they're all deployed at the four European bases where U.S. nuclear weapons are earmarked for delivery by aircraft of the host nation.



A satellite photo from

March this year shows part of the nuclear infrastructure at Ghedi Torre Air Base. Click on image to see full size.

Another tell sign is the presence of NATO Weapons Maintenance Trucks (WMT) at Ghedi. NATO has 12 of these trucks that are specially designed to enable field service of nuclear bombs at the storage bases in Europe. A satellite image provided by Digital Globe via Google Earth shows a WMT parked near the 704th MUNSS quarters at Ghedi on March 12, 2014. An older image from September 28, 2009, shows two WMTs at the same location (see image above).

These trucks will drive out to the 11 individual Protective Aircraft Shelters (PAS) that are equipped with underground Weapons Storage and Security System (WS3) vaults to service the B61 bombs. The WS3 vaults at Ghedi were completed in 1997; before that the weapons were stored in bunkers outside the main base. Once the truck is inside the shelter, the B61 is brought up from the vault, disassembled into its main sections as needed, and brought into the truck for service.

It is during this process of weapon disassembly when the electrical exclusion regions of the nuclear bomb are breached that a U.S. Air Force safety review [in 1997 warned](#) that "nuclear detonation may occur" if lightning strikes the shelter.

NATO is in the process of replacing the WMTs with a fleet of new nuclear weapons maintenance trucks known as the Secure Transportable Maintenance System (STMS). The trailers will have improved lightning protection. NATO provided \$14.7 million for the program in 2011, and in July 2012 the U.S. Air Force awarded a \$12 million contract to five companies in the United States to build 10 new STMS trailers for delivery by June 2014.

NATO Replacement of Nuclear Weapons Maintenance Truck

Designed for Nuclear Weapons Maintenance at Air Bases in Belgium, Germany, Italy, Netherlands, and Turkey
Delivery of 10 Trailers Scheduled for July 2014 at a Cost of \$15 million

Kristensen/FAS 2014

New Secure Transportable Maintenance System (STMS) trailer



Old Weapons Maintenance Truck



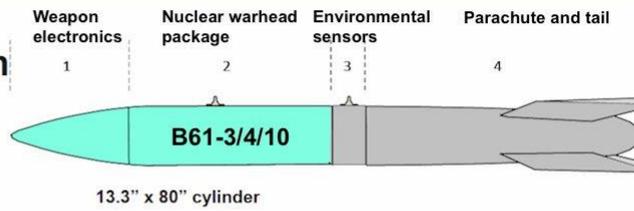
NATO's new mobile nuclear weapons maintenance system is scheduled for delivery to European nuclear bases in 2014. Click image to see full size.

The new trailers will be able to handle the new B61-12 guided standoff nuclear bomb that is planned for deployment in Europe from 2020. The B61-12 apparently will be approximately 100 lbs pounds (~45 kilograms) heavier than the existing B61s in Europe (see slide below) – even without the internal parachute. This suggests that a fair amount of new or modified components will be added. To better handle the heavier B61-12, each trailer will be equipped with hoist rails.

B61-12 Dimensions Compared With Current B61s in Europe (USAF drawing modified by FAS)

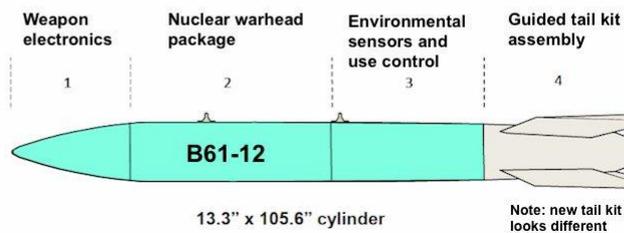
■ Baseline weapon

- Approx 755 lbs
- Length 141.6"
- Diameter 13.3"



■ Future weapon

- Approx 855 lbs
- Length 141.6"
- Diameter 13.3"



The new B61-12

bomb will be heavier than the B61s currently deployed in Europe. For pictures of actual B61-12 features, [click here](#).

The deployment to Ghedi 50 years ago was not the earliest or only deployment of U.S. nuclear weapons to Italy. During the Cold War, ten different U.S. nuclear weapon systems were deployed to Italy. The first weapons to arrive were Corporal and Honest John short-range ballistic missiles in August 1956. They were followed by nuclear bombs in April 1957 and nuclear land mines in 1959. All but one – nuclear bombs – of these nuclear weapon systems have since been withdrawn and scrapped.

U.S. Nuclear Weapons In Italy, 1956-2014*

Weapon	Deployment Start	Deployment End or Status
Corporal SSM	August 1956	September 1964
Honest John SSM	August 1956	June 1976
Bomb**	April 1957	Currently deployed at Aviano AB (50) and Ghedi Torre AB (20)
ADM	January-March 1959	1985?
Jupiter IRBM	June 1960	June 1963
Nike-Hercules SAM	October-December 1960	1988?
8-inch Howitzer	January-March 1964	1991
Sergeant SSM	January-March 1964	June 1976
Lance SSM	January-February 1976	1991
Depth bomb	January-March 1972	1991

Key: ADM = Atomic Demolition Munitions; IRBM: Intermediate-Range Ballistic Missile; SAM = Surface-to-Air Missile; SSM = Surface-to-Surface Missile.

* Primary sources: U.S. Department of Defense, Office of the Assistant Secretary of Defense (Atomic Energy), *Custody and Deployment of Nuclear Weapons: July 1945 through September 1977*, February 1978. Partially declassified and released to Robert S. Norris under the Freedom of Information Act; Robert S. Norris, et al., "Where they were," *Bulletin of the Atomic Scientists*, November 1999, pp. 26-35; Robert S. Norris, et al., "Appendix B': Deployment by Country, 1951-1977," NRDC Nuclear Notebook, *Bulletin of the Atomic Scientists*, November 1999, pp. 66-67; and author's estimates.

** Various designs. The current designs include the B61-3 and B61-4 tactical bombs.

Kristensen/FAS 2014 [Click table to see](#)

larger version.

A decade ago, most B61s in Europe were stored in Germany and the United Kingdom, but today, Italy has the honor of being the NATO country with the most U.S. nuclear weapons deployed on its territory; a total of 70 of all the 180 B61 bombs remaining in Europe (39 percent). Italy is also the

only country with two nuclear bases: the Italian base at Ghedi and the American base at Aviano. Aviano Air Base is home to the U.S. 31st Fighter Wing with two squadrons of nuclear-capable F-16 fighter-bombers. One of these, the 555th Fighter Squadron, was temporarily forward deployed to Lask Air Base in Poland in March 2014.

US Nuclear Weapons In Europe, 2014					
Country	Base	Wing	Custodian	Vaults*	Weapons
Belgium	Kleine Brogel	10 W Tac	701 MUNSS	11	20
Germany	Büchel	33 JABOG	702 MUNSS	11	20
Italy	Aviano	31 FW	31 MUNS	18	50
	Ghedi Torre	6 Stormo	704 MUNSS	11	20
Netherlands	Volkel	1 Wing	703 MUNSS	11	20
Turkey	Incirlik	**	39 Base Wing	25	50
5 Countries	6 bases			87	180

* Each WS3 (Weapons Security Storage System) underground vault can store up to four bombs but normally contains two bombs.

** The Turkish government does not permit the permanent deployment of a U.S. fighter wing at Incirlik. As a result, there are no nuclear strike exercises held at the base.

Kristensen/FAS 2014 Click table to see

larger version.

The nuclear “NATO mission” that the 6th Stormo wing at Ghedi Torre Air Base serves means that Italian Tornado aircraft are equipped and Italian Tornado pilots are trained in peacetime to deliver U.S. nuclear weapons in wartime. This arrangement dates back to before the nuclear Non-Proliferation Treaty (NPT), but it is increasingly controversial because Italy as a signatory to the NPT [has pledged](#) “not to receive the transfer from any transferor whatsoever of nuclear weapons...or of control over such weapons...directly, or indirectly.”

The United States, also a signatory to the NPT, [has committed](#) “not to transfer to any recipient whatsoever nuclear weapons...or control over such weapons...directly, or indirectly; and not in any way to assist, encourage, or induce any non-nuclear-weapon State to...acquire nuclear weapons..., or control over such weapons....”

In peacetime, the B61 nuclear bombs at Ghedi are under the custody of the 704th MUNSS, but the whole purpose of the NATO mission is to equip, train and prepare in peacetime for “transfer” and “control” of the U.S. nuclear bombs to the Italian air force in case of war.

The Nuclear Burden

Maintaining the NATO nuclear strike mission in Europe does not come cheap or easy but “steals” scarce resources from non-nuclear military capabilities and operations that – unlike tactical nuclear bombs – are important for NATO.

Italy pays for the basing of the U.S. Air Force 704th MUNSS at Ghedi, for security upgrades needed to protect the weapons at the base, and for training pilots and maintaining Tornado aircraft to meet the stringent certification requirements for nuclear strike weapons. Moreover, the cost of securing the B61 bombs at the European bases is expected to [more than double](#) over the next few years (to \$154 million) to meet increased U.S. security standards for storage of nuclear weapons.

But these costs are getting harder to justify given the serious financial challenges facing Italy. The air force’s annual flying hours dropped from 150,000 in 1990 to 90,000 in 2010, training reportedly declined by 80 percent from 2005 to 2011, and training for air operations other than Afghanistan

apparently has been “pared to the bone.” In addition, the Italian defense posture is in the middle of a 30-percent contraction of the overall operational, logistical and headquarters network spending. The F-35 fighter-bomber program, part of which is scheduled to replace the current fleet of Tornados in the nuclear strike mission, has already been cut by a third and the new government has signaled its intention to cut the program further.

Under such conditions, maintaining a nuclear mission for the Italian air force better be *really* important.

Most of the costs of the European nuclear mission are carried by the United States. Over the next decade, the United States plans to spend roughly [\\$10 billion](#) to modernize the B61 bomb, over \$1 billion more to make the new guided B61-12 [compatible](#) with four existing aircraft, another \$350 million to make the new stealthy F-35 fighter-bomber nuclear-capable, and [another \\$1 billion](#) to sustain the deployment in Europe.

This adds up to roughly \$12.5 billion for sustaining, securing, and modernizing U.S. nuclear bombs in Europe over the next decade. Whether the price tag is worth it obviously must be weighed against the security benefits it provides to NATO, how well the deployment fits with U.S. and NATO nuclear arms control policy, and whether there are more important defense needs that could benefit from that level of funding.

Fake Versus Real Reassurance

The anniversary placard displayed at Ghedi Air Base claims that the U.S. non-strategic nuclear bombs have “protected the free nations of the world” even after the end of the Cold War. And during the nuclear safety exercise at Ghedi in January, the commander of the U.S. Air Force 52nd Fighter Wing [told](#) the U.S. and Italian security forces that “your mission today is still *as relevant* as when together our country stared down the Soviet Union alongside a valued member of our enduring alliance.” (Emphasis added).

That is probably an exaggeration, to put it mildly. In fact, it is hard to find any evidence that the deployment of non-strategic nuclear weapons in Europe after the end of the Cold War has protected anything or that the mission is even remotely as relevant today. The biggest challenge today seems to be to protect the weapons and to find the money to pay for it.

NATO’s response to Russia’s invasion of Ukraine, moreover, strongly suggests that NATO itself does not attribute any real role to the non-strategic nuclear weapons in reassuring eastern NATO allies of a U.S. commitment to defend them. Yet this reassurance role is the main justification used by proponents of the deployment. In hindsight, the reassurance effect appears to be largely doctrine talk, while NATO’s actual response has focused on non-nuclear forces and exercises.

To the extent that a potential nuclear card has been played, such as when three B-52 and two B-2 nuclear-capable bombers were temporarily deployed to England earlier this month, it was done with long-range *strategic bombers*, not tactical dual-capable aircraft. The fact that nuclear fighter-bombers were already in Europe seemed irrelevant. The same was done in March 2013, when the United States deployed long-range bombers over Korea to reassure South Korea and Japan against North Korean threats.

No eastern European ally has said: “Hold the bombers, hold the paratroopers, hold the naval exercises! The B61 nuclear bombs in Italy, Germany, Belgium, the Netherlands and Turkey are here to reassure us against Russia.”

In the real world, the non-strategic nuclear weapons in Europe are fake reassurance because they are useless and meaningless for the kind of crises that face NATO allies today or in the foreseeable future. NATO pays a king's ransom for the deployment with very little to show for it.

President Obama has asked for \$1 billion to reassure Europe against Russia. But he could get a dozen non-nuclear European Reassurance Initiatives for the price of sustaining, modernizing, and deploying the non-strategic nuclear bombs in Europe. Doing so would help "put an end to Cold War thinking" as he promised in Prague five years ago.

This publication was made possible by a grant from the Ploughshares Fund and New Land Foundation. The statements made and views expressed are solely the responsibility of the author.

<https://fas.org/blogs/security/2014/06/ghedi/>