



L'INTERVISTA • Hans Kristensen

“Quaranta nuove atomiche Usa entro tre anni in Italia”

Stefania Maurizi

E il bombardamento che ha cambiato per sempre la Storia. Settanta-cinque anni fa, la città giapponese di Hiroshima veniva distrutta dalla prima bomba atomica. Uccise istantaneamente 70mila persone – appena 4 mesi dopo erano 140mila – e aprì una nuova era: l'era nucleare, in cui l'uomo acquisì la capacità di sterminare l'intera specie umana in un colpo solo. Tre giorni dopo Hiroshima, toccò a Nagasaki: nei due bombardamenti furono uccise circa 300mila persone e da allora si affermò "il tabù nucleare". A oggi non sono mai state più usate in combattimento. Ma ne sono state costruite decine di migliaia: nel pieno della Guerra fredda, ce ne erano almeno 70.300. Secondo l'esperto americano Stephen Schwartz, stima che, dagli anni 40 al 1996, gli Usa da soli abbiano speso 5.800 miliardi di dollari in valuta del 1996 per queste armi. Quanti sono 5.800 miliardi? Se prendiamo banconote da un dollaro e le mettiamo una sopra l'altra arriviamo fino alla Luna e torniamo indietro. E oggi? Il *Fatto Quotidiano* ha intervistato l'autorità in materia di questi armamenti: Hans Kristensen della *Federation of American Scientists*.

Settantacinque anni dopo Hiroshima e Nagasaki, quante armi nucleari ci sono nel mondo? Dalle nostre stime, ne risultano circa 13.400. Nel novembre scorso, lei ha pubblicato una ricerca secondo cui gli Usa hanno 150, forse 100, ordigni nucleari stoccati in Europa e l'Italia rimane il paese europeo col più alto numero di bombe e l'unico con due basi nucleari: Aviano e Ghedì. Lei ha stimato che ci siano 20 armi nucleari ad Aviano e 20 a Ghedì. Queste cifre sono ancora attuali? Sì, sono le mie stime aggiornate. Le vecchie bombe stoccate ad Aviano e Ghedì sono le B61-3 e B61-4, ma verranno presto rimpiazzate dalle nuove: le B61-12. Quante ne arriveranno e cosa avranno di diverso? A meno che la Casa Bianca non dia nuove disposizioni, il numero rimarrà lo stesso di quelle già oggi presenti e la potenza sarà la stessa delle B61-4: la nuova bomba B61-12 usa la

75 ANNI FA LA BOMBA SU HIROSHIMA ANNIVERSARIO dell'esplosione sulla città giapponese che provocò almeno 140mila vittime. La *Federation of American Scientists* monitora gli armamenti atomici che attualmente nel mondo sarebbero 13.400. In Europa ci sarebbero tra 100 e 150 testate nucleari statunitensi, delle quali una quarantina in Italia (da montare sui caccia Usa F16), divise tra la base di Ghedì e Aviano



6 agosto 1945 Il fungo prodotto dall'esplosione della bomba su Hiroshima. A sinistra, un F-16 ad Aviano FOTO ANSA



stessa struttura in termini di testata nucleare. Il potenziamento, dal punto di vista militare, non è da ricercare nella testata, ma nel kit di coda che triplicherà la precisione della bomba. **Che cosa sappiamo dell'accordo Usa-Italia che consente agli americani di stoccare le loro armi nucleari nel nostro Paese?** L'accordo bilaterale è segreto, ma è noto da anni col nome in codice *Stone Ax*. A meno che

SCIENZIATO "GLI ORDIGNI AGGIORNATI AL POSTO DEI VECCHI"

non siano intervenuti, rimane quello. Contiene le regole che Usa e Italia hanno concordato per lo stoccaggio, la custodia e, potenzialmente, l'uso. L'accordo disciplina in particolare come vengono custodite le bombe nelle basi di Aviano e Ghedì. **L'Italia aderisce al più im-**

portante strumento per limitare le Atomiche: il Trattato di Non Proliferazione Nucleare (Tnp). La loro presenza sul territorio italiano è legalmente compatibile con esso? Sì, il Tnp non limita in alcun modo né regola il dispiegamento delle armi nucleari. Tuttavia, proibisce il trasferimento diretto o indiretto di questi ordigni da una potenza nucleare a una non nucleare.

Poiché, però, il trasferimento delle bombe Usa all'Italia e le intese di condivisione di queste armi risalgono a un periodo precedente alla data in cui il Tnp fu firmato, né lo stoccaggio né le intese violano il Trattato dal punto di vista legale. Detto questo, però, poiché questi ordigni sono stati consegnati per essere usati dall'Italia in caso di guerra e poiché l'Aeronautica militare italiana è stata dotata di essi ed è stata addestrata al loro uso, a mio avviso, non c'è dubbio che le intese violino e come lo spirito del Trattato, nonostante da un punto di vista strettamente legale non sia così.

Quando arriveranno le nuove bombe in Italia? Probabilmente tra il 2022 e il 2023.

Chi le sta costruendo? Tutte le armi nucleari vengono prodotte negli Usa: la testata nucleare viene costruita e gestita dal *Los Alamos National Laboratory*, le componenti non nucleari sono sviluppate dal *Sandia National Laboratories* e assemblate al *Kansas City Plant*, e il kit di coda verrà prodotto dalla Boeing. Una volta pronte tutte le componenti, le bombe vengono assemblate al *Pantex Plant* in Texas.

Se le truppe americane e gli F-16 verranno spostati dalla Germania, la decisione avrà impatto sulle armi nucleari americane stoccate in Italia?

No. Lo squadrone di F-16 che verrebbe spostato dalla base di Spangdahlem ad Aviano non è assegnato a missioni nucleari. Quel ruolo è assegnato a due squadroni di F-16 che si trovano già ad Aviano.

"SCORRETTEZZE"

PROVOCAZIONE ANTI-PECHINO AMERICANI IN VISITA A TAIPEI

Trump rompe il tabù taiwanese

Giampiero Gramaglia

A DONALD TRUMP piace infrangere tabù e destare sorpresa, specie in politica estera e in Asia. Dopo averlo fatto, pur senza ricavarne nulla, con la Corea del Nord e il suo dittatore Kim Jong-un, ci riprova con Taiwan.

Trump è stato il primo e unico presidente Usa a incontrare un leader nordcoreano e a mettere piede sul territorio nordcoreano. Con Taiwan, l'approccio è meno spettacolare: il magnate non intende andarci di persona – almeno non ora –, ma vi invia una delegazione ufficiale. La Cina, va bene stuzzicarla e punzecchiarla, ma ci vuole pur sempre una certa misura: Pechino non è Pyongyang, anche se Xi Jinping è meno imprevedibile di Kim, e Taipei non vale una guerra commerciale, economica, diplomatica su larga scala. Così Trump si limita a inviare a Taiwan una delegazione ufficiale: è la prima volta in 6 anni, ed è la

missione di più alto livello mai mandata da Washington a Taipei dal 1979, da quando gli Usa ruppero le relazioni diplomatiche con l'isola. Lo sottolineano più riconosciuti come Cina comunista. Lo sottolinea l'*American Institute* a Taipei che, di fatto, funge da ambasciata. Attualmente, solo una quindicina di Paesi, fra cui la Santa Sede, riconoscono Taiwan.

L'ufficio Usa responsabile delle relazioni commerciali con Taiwan ha confermato che il segretario alla Salute, Alex Azar, guiderà la delegazione. La missione è di rischiare di aggravare le tensioni tra Cina e Usa, già "avvelenate" su fronti economico e commerciale, ma anche militare, specie nel Pacifico meridionale, e diplomatico, con le chiusure in sequenza dei consolati di Houston e Canton. Senza contare le accuse di spionaggio e cyber-interferenze, i casi Huawei e Tik

Tok, l'insistenza sulle responsabilità di Pechino per la diffusione del coronavirus, le sanzioni e le parole al vetriolo.

All'annuncio della visita a Taiwan di Azar, la Cina ha formalmente protestato, sollecitando con forza l'Amministrazione statunitense a "non inviare segnali sbagliati ai secessionisti" dell'isola. Il portavoce del ministero degli Esteri Wang Wenbin ha esplicitamente detto che la visita di Azar "mette a repentaglio la pace".

Opposte le reazioni a Taipei. La presidente Tsai Ing-wen scrive su Twitter: "Non vedo l'ora di dare il benvenuto" ad Azar e "illustrargli come il modello Taiwan abbia funzionato contro il Covid-19". La visita è una riprova della forte partnership basata su un'amicizia di lunga data e su valori condivisi. Secondo la Johns Hopkins University, Taiwan – 23 milioni di abitanti –, ha finora registrato 475 contagi da coronavirus e 7 vittime.



Di seguito gli studi originali da cui è attinta l'intervista:

Posted on Oct. 16, 2019 in [NATO](#), [Nuclear Weapons](#), [Tactical Nuclear Weapons](#), [Turkey](#), [United States](#) by [Hans M. Kristensen](#)

Urgent: Move US Nuclear Weapons Out Of Turkey

By Hans M. Kristensen

Should the U.S. Air Force withdraw the roughly 50 B61 nuclear bombs it stores at the Incirlik Air Base in Turkey? The question has come to a head after Turkey's invasion of Syria, Erdogan's increasingly authoritarian leadership and deepening discord with NATO, Trump's inability to manage U.S. security interests in Europe and the Middle East, and war-torn Syria only a few hundred miles from the largest U.S. nuclear weapons storage site in Europe.

According to [The New York Times](#), State and Energy Department (?) officials last weekend quietly reviewed plans for evacuating the weapons from Incirlik. "Those weapons, one senior official said, were now essentially Erdogan's hostages. To fly them out of Incirlik would be to mark the de facto end of the Turkish-American alliance. To keep them there, though, is to perpetuate a nuclear vulnerability that should have been eliminated years ago."

That review is long overdue! [Actually, I've heard there have been several reviews and a lively internal debate since the 2016 coup attempt.] Some of us have been calling for withdrawal for years (see [here](#) and [here](#)), but officials have resisted saying it wasn't as bad as it looked and that the deployment still served a purpose. They were wrong. And by waiting so long to act, the United States has painted itself into a corner where the choice between nuclear security and abandoning Turkey has become unnecessarily stark and urgent.

The situation is even more untenable because Incirlik in just a few years is scheduled to receive a large shipment of the new [B61-12 guided nuclear bomb](#), which would be a recommitment to nuclear deployment in Turkey.

This year is the 60th anniversary of the [first deployment of nuclear weapons to Turkey](#). It is time to bring them home.

Nuclear Weapons At Incirlik

The specific reference in the *New York Times* article made by officials to nuclear weapons at Incirlik is the most recent and authoritative confirmation that nuclear weapons are still stored at the base. That confirms what I have been hearing and sources at US Air Forces Europe confirmed the report, [telling William Arkin](#) the weapons are still there. [There have been rumors](#) the weapons were removed after the coup attempt in 2016 (and some really bad disinformation that they had been moved to Romania). All of those rumors were wrong. An [article](#) on the official Incirlik Air Base web site even confirms that the mission of the 39th Operations Support Squadron is "to orchestrate and control US, Turkish, and coalition forces operating at Incirlik Airbase in the execution of full-spectrum airpower *and nuclear deterrent operations*" (emphasis added). Given that the article will likely be removed now that I have pointed this out, it is reproduced in full below:



[HOME](#) > [ABOUT US](#) > [FACT SHEETS](#) > [DISPLAY](#)

39th Operations Support Squadron

Published October 26, 2018

Source: <https://www.incirlik.af.mil/About-Us/Fact-Sheets/Display/Article/724847/39th-operations-support-squadron/>

Annotations: Kristensen/FAS, 2019



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The 39th Operations Support Squadron has a key role in the mission at Incirlik and it couldn't be done without a little teamwork.



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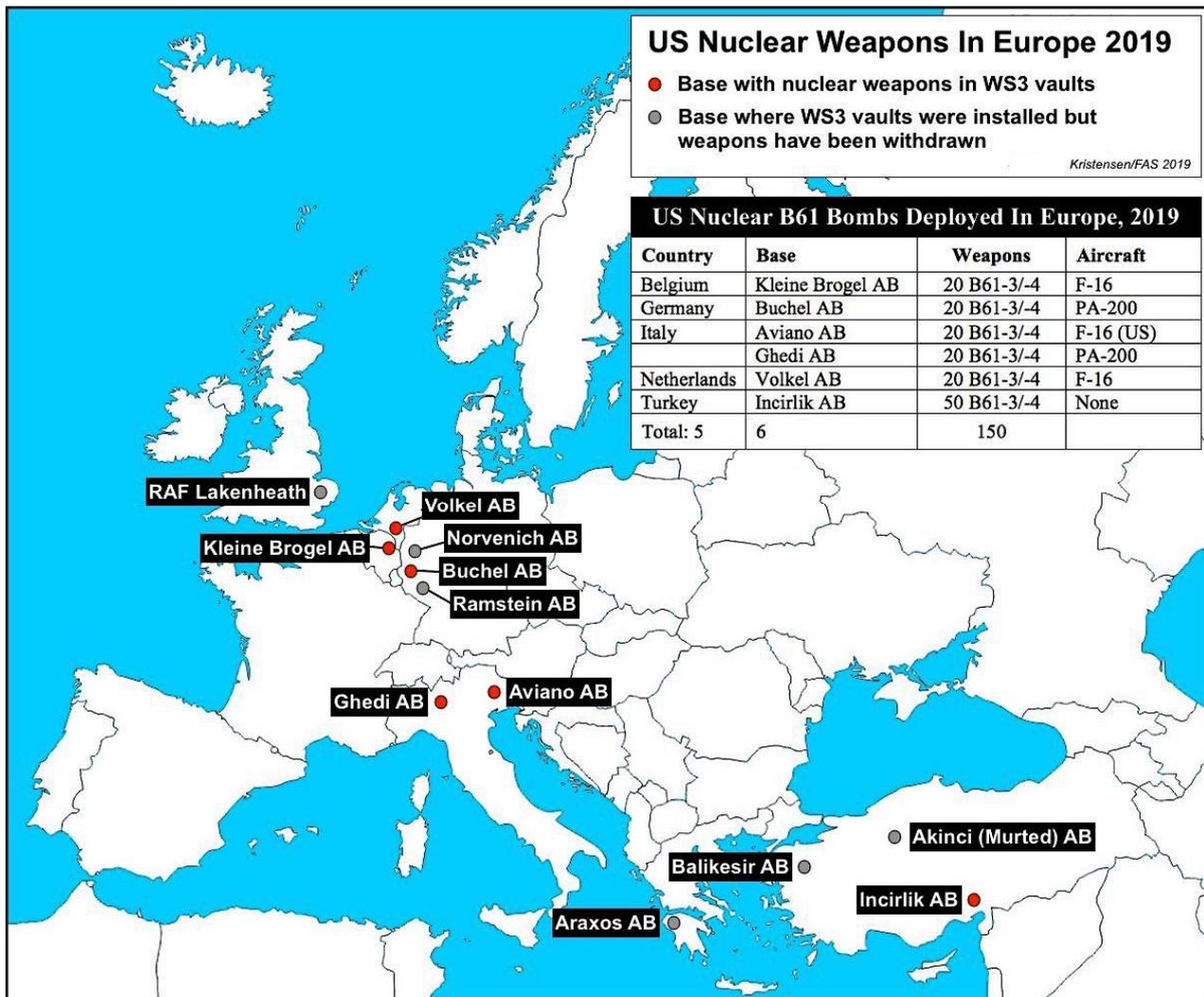
The 39 Operations Support Squadron leads world-class airfield & support operations to orchestrate and control US, Turkish, and coalition forces operating at Incirlik Airbase in the execution of full-spectrum airpower and nuclear deterrent operations.

Our vision is to be USAFE's premier power projection platform and the wing's agile fulcrum between surety, mobility, and contingency operations.

The OSS operates \$148 million dollars in direct equipment providing Air Traffic Control, weather services, intelligence support, airfield management, and airfield systems maintenance.

We are the Hydras! Together, Ready, and Exceptional!

I have estimated for the past several years that the Air Force stores about 50 B61 nuclear gravity bombs at Incirlik, one-third of the 150 nuclear weapons currently deployed in Europe (see figure below). This estimate has been used by a wide range of news reports and commentators. The number of bombs at Incirlik has [decreased over the past two decades from 90 in 2000](#). In those days, 40 of the 90 bombs were earmarked for delivery by Turkish F-16s. Those 40 bombs used to be stored in 6 vaults at both Akinci AB and Balikesir AB (20 at each) until they were moved to Incirlik when the US Air Force withdrew its Muniton Support Squadrons from the Turkish bases in 1996. The 40 "Turkish" bombs remained at Incirlik until around 2005 when they were shipped back to the United States as part of the Bush administration's unilateral nuclear reduction in Europe.

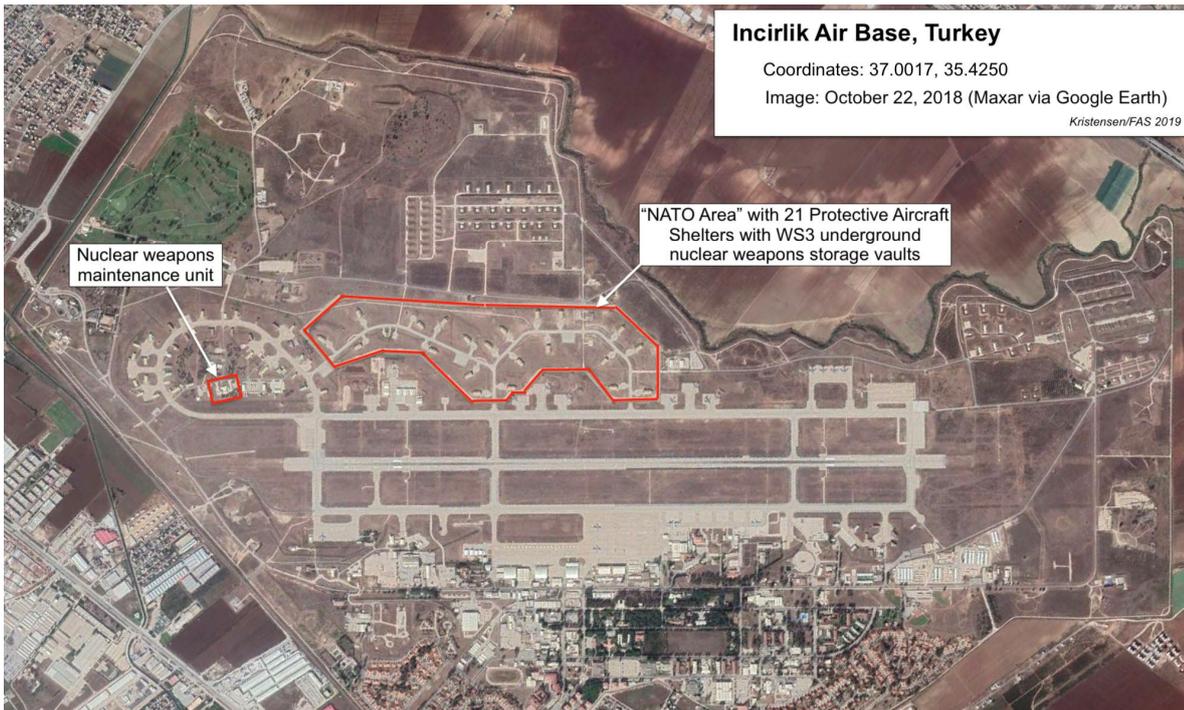


The US Air Force stores 150 nuclear bombs at six bases in five NATO countries. Click on map to view full size.

The remaining 50 bombs are for use by US jets, even though Turkey never allowed the US Air Force to permanently base fighter-squadrons at Incirlik. Jets would have to fly in during a crisis to pick up the weapons or they would have to be shipped to other locations before use. As a result, the nuclear posture at Incirlik has been more a storage site than a fighter-bomber base during the past two decades.

Although the Turkish participation in the NATO nuclear sharing mission was lessened (some would say mothballed) by the withdrawal of the “Turkish” weapons, the Turkish F-16s continued to serve a nuclear role. Despite local reports that F-16s never had a nuclear role, the US Air Force in 2010 [informed Congress](#) that “Turkey uses Turkish F-16s to execute their nuclear mission,” and that some of the F-16s would be upgraded to be able to deliver the new B61-12 bomb until the F-35A could take over the nuclear strike mission in the 2020s. That is now not going to happen after the Trump administration canceled the F-35 sale.

In 2015, satellite images [revealed construction](#) of a new security perimeter around most of the aircraft shelters with nuclear weapons storage vaults. Of the 25 shelters that originally were equipped with vaults, only 21 were included in the new security area with a capacity to store up to a maximum of 84 nuclear bombs. Normally only about two bombs are stored in each vault, for a total of inventory of 40-50 bombs at Incirlik.



The nuclear weapons mission areas at Incirlik AB include the "NATO Area" where nuclear weapons are stored and the nuclear weapons maintenance unit that manages the underground storage vaults

As recently as last month, Vice Chief Staff of the Air Force, Gen. Stephen W. Wilson, visited Incirlik and was given tours of the various functions and facilities at the base. One of these was Protective Aircraft Shelter H-2 inside the "NATO Area" where he spoke to members of the 39th Security Force that protects the nuclear weapons (see below). He was likely also shown the inside of the shelter and the weapons in the vault.

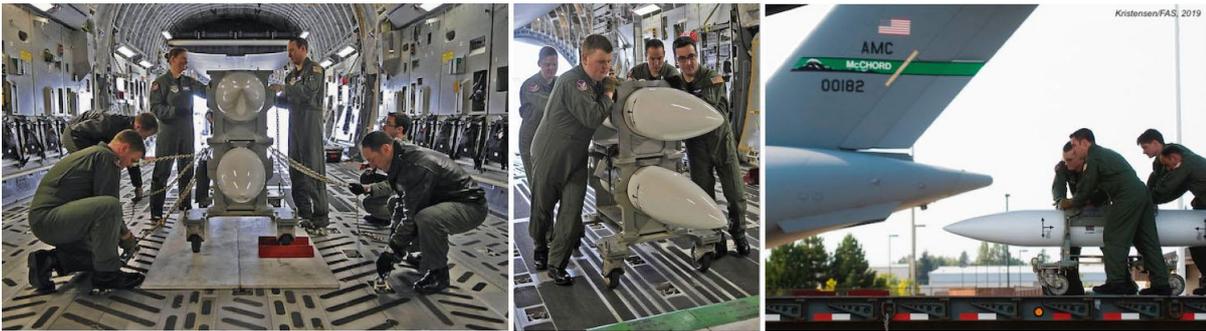


Last month, the Air Force Chief of Staff was taken to a nuclear weapons storage shelter at Incirlik AB. Click on image to view full size.

Recent Activities

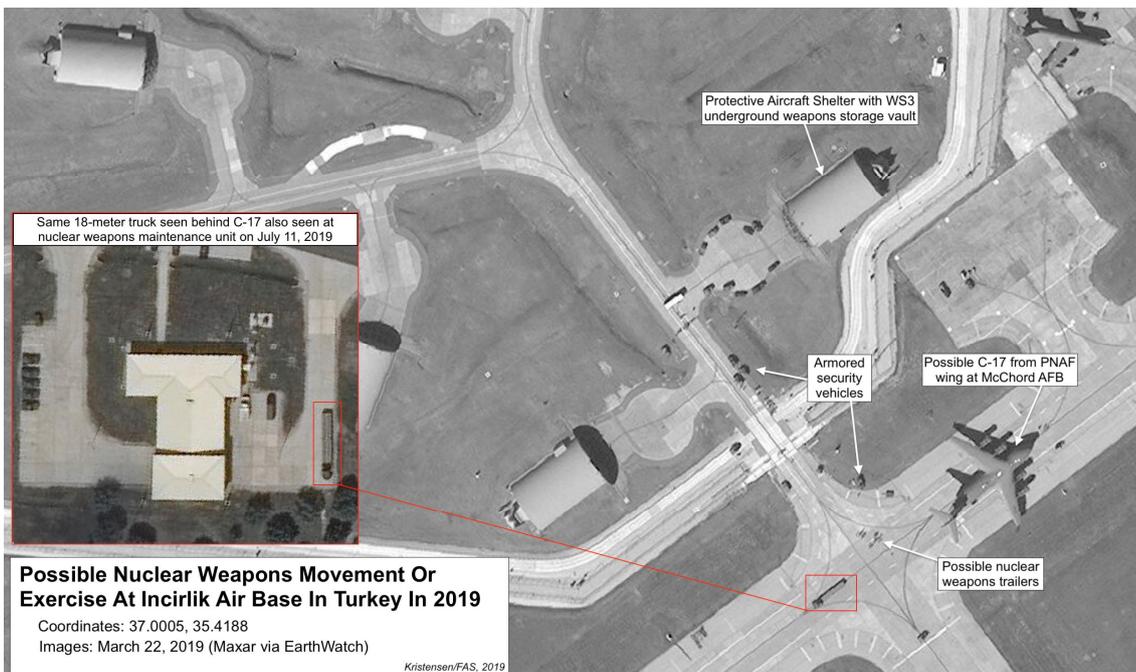
If the Air Force decided to withdraw the B61 bombs from Incirlik, it would look pretty much like activities captured by Maxar's satellites in 2019 and 2017. Those images show what appears to be either actual nuclear weapons movements or training to remove them.

One photo from March 22, 2019, shows a C-17 transport aircraft – likely from the 4th Airlift Squadron of the 62nd Airlift Wing at Joint Base Lewis-McChord in Washington – parked right outside the main gate to the NATO Area. The 4th Airlift Squadron, which is the only unit in the Air Force that is qualified to airlift nuclear weapons, flies Prime Nuclear Airlift Force (PNAF) and Emergency Nuclear Airlift Operations (ENAO) missions (see images below).



Withdrawal of US nuclear weapons from Turkey would be carried out by personnel from the 4th Airlift Squadron of the 62nd Airlift Wing based at Joint Base Lewis-McChord in Washington. These Air Force images show loading of B61 bombs onto a C-17 transport aircraft. Withdrawing the 50 B61 bombs at Incirlik would likely require two aircraft.

The satellite image shows the C-17 and gate area surrounded by armored vehicles and armed guards of the 39th Security Force as well as technicians to protect and carry out the weapon movement. One of the unique vehicles seen is an 18-meter truck lined up with the loading pad of the C-17. The same type of truck can be seen parked at the weapons maintenance unit building a few months later (see image below).



This Maxar satellite image acquired via Earth Watch shows what appears to be a nuclear weapons movement or exercise in March 2019. Click on image to view full size.

Another set of Maxar satellite photos of a possible nuclear weapons movement or exercise is from December 2017. A Nuclear Security Inspection that year (and 2014) [reportedly](#) included weapons emergency evacuation drills. The scenario on the 2017 image is similar to that on the 2019 image: a C-17 parked outside the gate, security vehicles surrounding the scene, and transporters for moving weapons. But the 2017 photos are unique because they were taken moments apart as the satellite passed overhead. As a result, movements become visible: On the first image, a possible weapons trailer towed behind a truck in a column of armored security vehicles is moving toward the outer gate of the NATO Area. On the second photo, the column has passed through the gate onto the tarmac and the towed trailer is turning toward the rear of the C-17. The aircraft shadow shows the loading ramp is open and ready to receive the weapons (see image below).



Possible Nuclear Weapons Movement Or Exercise At Incirlik Air Base In Turkey In 2017
 In first image (top) weapons trailer is moving between security forces toward open gate. In second image (below), taken a few moments later, the weapons trailer is outside the double-fence NATO Area and turning toward the C-17 cargo plane.
 Coordinates: 37.0005, 35.4188
 Images: December 3, 2017 (Maxar via EarthWatch)
 Kristensen/FAS, 2019

This unique double-image shows what appears to be a nuclear weapons movement or exercise in December 2017. Click on image to view full size.

The Task At Hand: Withdraw The Weapons!

The B61 nuclear bombs at Incirlik should have been withdrawn long ago but tradition, Cold War thinking, and bureaucratic inertia prevented officials from doing the right thing. Now things have come to a head where the United States is faced with the choice of securing its weapons or be seen as abandoning Turkey.

Withdrawing the weapons does not, of course, mean the United States is abandoning Turkey. That relationship is already in serious trouble and keeping the weapons at Incirlik based on the idea that it will somehow counterweight Turkey's further drift away from NATO is probably an illusion. That boat seems to have sailed; the relationship is likely to deteriorate whether or not there are nuclear weapons at Incirlik. That is the reality the Air Force must relate to now.



Nuclear weapons security convoy at Incirlik AB in 2009.

Another argument against withdrawal will be that moving them out of Turkey will cause the other members of the so-called nuclear sharing arrangement (Belgium, Germany, Holland, Italy) to question why they should continue to store U.S. nuclear weapons. Withdrawal from Turkey could, so the argument goes, trigger a domino effect of withdrawal from other countries as well.

But the withdrawal of U.S. nuclear bombs [from Greece in 2001](#) and [from England five years later](#) did not cause the other countries to demand withdrawal as well or the collapse of NATO. If they truly believe deployment of U.S. nuclear weapons is important for NATO security, then they will stay. If the mission falls with withdrawal from Turkey, then they obviously don't think it's important and the weapons should be withdrawn from all the countries anyway. The U.S. extended deterrence posture in Europe can adequately be maintained with advanced conventional forces backed up by strategic forces in the background.

The B61 bombs at Incirlik could easily be dispersed to empty storage vaults in the other countries. Space is not a problem. There are a total of 96 empty weapon slots in the active WS3 vaults in Belgium, Germany, Holland, and Italy. Moreover, there are 25 empty and inactive WS3 vaults with room for 100 bombs at RAF Lakenheath. But public and parliamentary opposition would likely prevent increasing the number of nuclear bombs stored in those countries. If the order goes out to evacuate Incirlik, it seems more likely the bombs would be returned to the United States.

There will be some people who will argue that deteriorating relations with Russia and Moscow's alleged increased reliance on a so-called "escalate-to-deescalate" strategy of using tactical nuclear weapons first prevent the United States from reducing – certainly withdrawing – its tactical nuclear weapons from Europe. Those are curiously the same people who also argue that the United States should deploy a new low-yield warhead on its strategic submarines and a new nuclear cruise missile on its attack submarines to better counter Russian tactical nuclear weapons – a thinking that was recently endorsed by the Trump administration's [Nuclear Posture Review](#). That seems to signal to the European allies that the United States actually no longer believes the deployment of B61 nuclear bombs in Europe is credible and that other and better weapons are needed.



Special security forces at Incirlik frequently practice defending against armed attackers trying to damage or steal the B61 nuclear bombs stored at the base, such as these exercises in 2003 (middle), 2009 (left), and 2016 (right). Additional security equipment and forces have been deployed to Incirlik recently in response to an increased threat against the weapons.

Whatever one might think about U.S. tactical nuclear weapons in Europe, Turkey is no longer an acceptable location. Erdogan’s confrontational and authoritarian leadership is rapidly undermining Turkey’s status as a reliable NATO ally, and the deteriorating security situation in the region presents a real physical threat to the weapons at Incirlik. That threat is real and the U.S. military sees it as real. So much so that an extra security force squadron deployed to Incirlik from Aviano Air Base in Italy to beef up nuclear security in response to “regional turmoil and government instability” [according to USAF source](#), and Ohio Army National Guard military police [reportedly](#) were dispatched to Incirlik specifically to increase base security.

The security threat to the weapons at Incirlik is urgent and the continued deployment of nuclear weapons at the location is unjustifiable and incompatible with U.S. nuclear security standards. If you don’t believe that, ask yourself this question: If there were no U.S. nuclear weapons in Turkey and someone asked for them to be deployed to Incirlik, would the Pentagon approve?

I doubt it. It’s time to face reality and withdraw the weapons from Turkey before they have to be evacuated under fire.

<https://fas.org/blogs/security/2019/10/nukes-out-of-turkey/>

<https://fas.org/category/nato/>

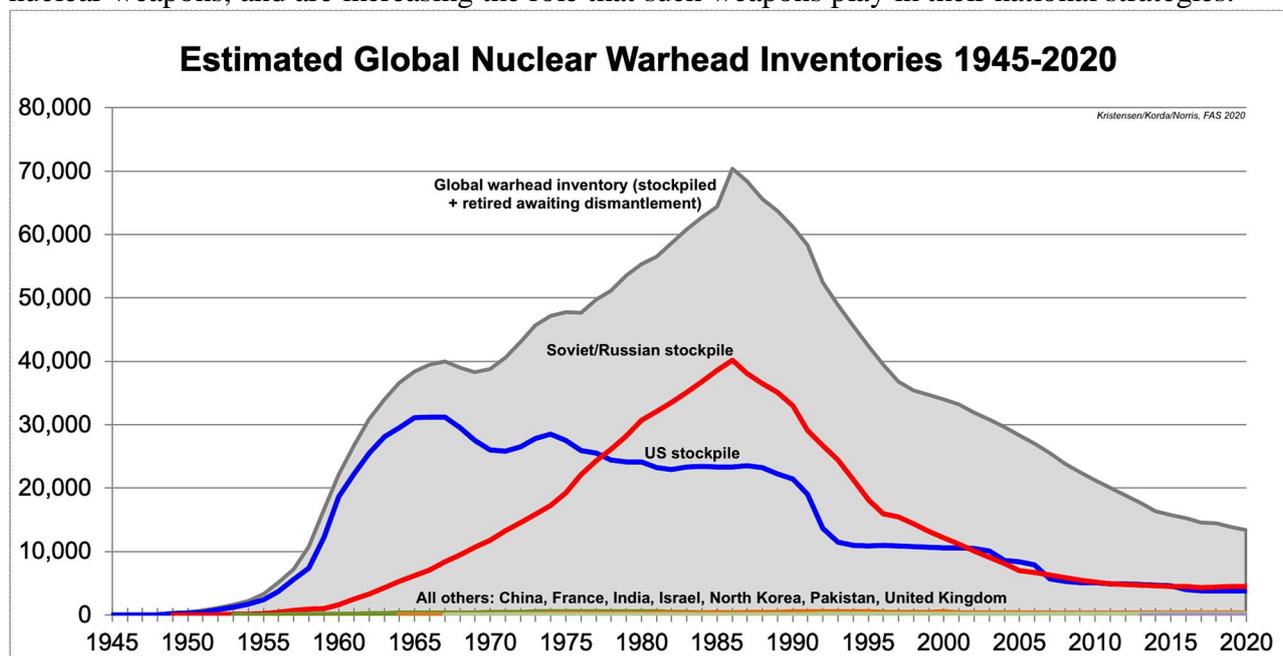
Additional information:

- [US nuclear weapons, 2019](#)
- [Tactical nuclear weapons, 2019](#)
- [Upgrades At US Bases In Europe Acknowledge Security Risk](#) (2015)

Status of World Nuclear Forces

By [Hans M. Kristensen](#) and [Matt Korda](#)

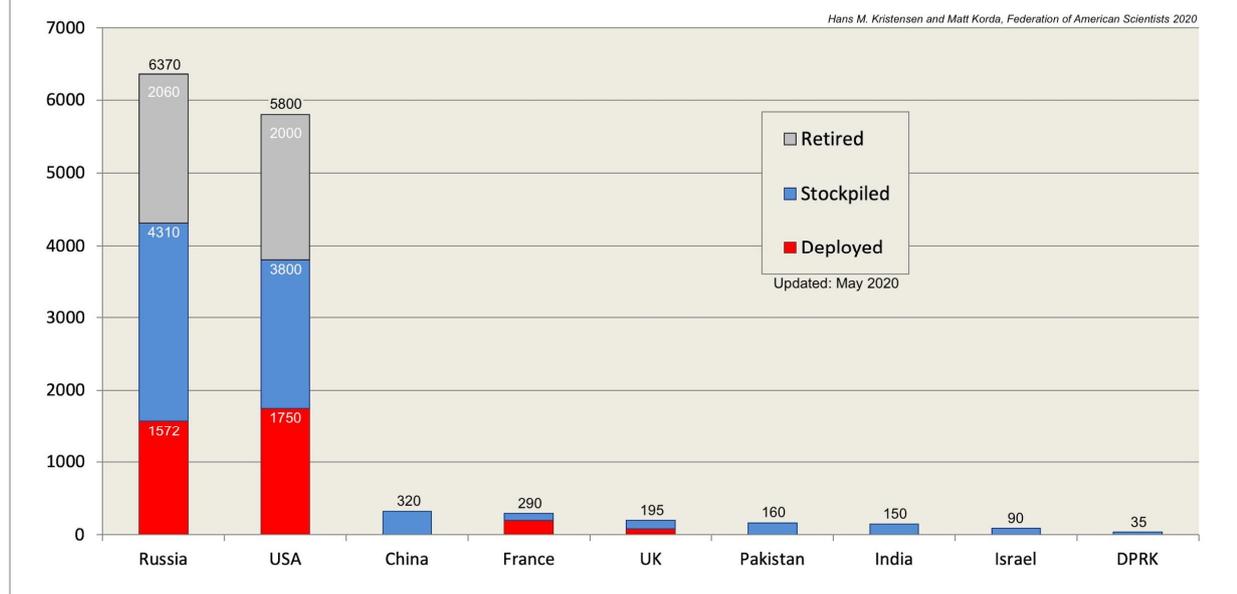
[Current update: April 2020] The number of nuclear weapons in the world has declined significantly since the Cold War: down from a peak of approximately 70,300 in 1986 to an estimated 13,410 in early-2020. Government officials often portray that accomplishment as a result of current or recent arms control agreements, but the overwhelming portion of the reduction happened in the 1990s. Some also compare today's numbers with that of the 1950s, but that is like comparing apples and oranges; today's forces are vastly more capable. The pace of reduction has slowed significantly compared with the 1990s. Instead of planning for nuclear disarmament, the nuclear-armed states appear to plan to retain large arsenals for the indefinite future, are adding new nuclear weapons, and are increasing the role that such weapons play in their national strategies.



Despite progress in reducing Cold War nuclear arsenals, the world's combined inventory of nuclear warheads remains at a very high level: roughly 13,410 warheads as of early-2020. Of these, nearly 9,320 are in the military stockpiles (the rest are awaiting dismantlement), of which some 3,720 warheads are deployed with operational forces, of which about 1,800 US, Russian, British and French warheads are on [high alert](#), ready for use on short notice.

Approximately 91 percent of all nuclear warheads are owned by Russia and the United States who each have around 4,000 warheads in their military stockpiles; no other nuclear-armed state sees a need for more than a few hundred nuclear weapons for national security:

Estimated Global Nuclear Warhead Inventories, 2020



Globally, the number of nuclear weapons is declining, but the pace of reduction is slowing compared with the past 30 years. The United States, Russia, and the United Kingdom are reducing their overall warhead inventories, France and Israel have relatively stable inventories, while China, Pakistan, India, and North Korea are increasing their warhead inventories.

All the nuclear weapon states continue to modernize their remaining nuclear forces, adding new types, increasing the role they serve, and appear committed to retaining nuclear weapons for the indefinite future. For an overview of global modernization programs, see [our contribution to the SIPRI Yearbook](#). Individual country profiles are available from the [FAS Nuclear Notebook](#).

The exact number of nuclear weapons in each country's possession is a closely held national secret. Yet the degree of secrecy varies considerably from country to country. Between 2010 and 2018, the United States disclosed its total stockpile size, but in 2019 the Trump administration [stopped that practice](#). Despite such limitations, however, publicly available information, careful analysis of historical records, and occasional leaks make it possible to make best estimates about the size and composition of the national nuclear weapon stockpiles:

Status of World Nuclear Forces 2020*

Country	Deployed Strategic	Deployed Nonstrategic	Reserve/ Nondeployed	Military Stockpile ^a	Total Inventory ^b
Russia	1,572 ^c	0 ^d	2,740 ^e	4,312	6,372 ^f
United States	1,600 ^g	150 ^h	2,050 ⁱ	3,800 ^j	5,800 ^k
France	280 ^l	n.a.	10 ^l	290	290
China	0 ^m	?	320	320	320 ^m
United Kingdom	120 ⁿ	n.a.	75	195	195 ⁿ
Israel	0	n.a.	90	90	90 ^o
Pakistan	0	n.a.	160	160	160 ^p
India	0	n.a.	150	150	150 ^q
North Korea	0	n.a.	35	35	35 ^r
Total: ^s	~3,720	~150	~5,630	~9,320	~13,410

How to read this table: “Deployed strategic warheads” are those deployed on intercontinental missiles and at heavy bomber bases. “Deployed nonstrategic warheads” are those deployed on bases with operational short-range delivery systems. “Reserve/Nondeployed” warheads are those not deployed on launchers and in storage (weapons at bomber bases are considered deployed). The “military stockpile” includes active and inactive warheads that are in the custody of the military and earmarked for use by commissioned deliver vehicles. The “total inventory” includes warheads in the military stockpile as well as retired, but still intact, warheads in the queue for dismantlement. For additional guidance, see endnotes below (**note: as estimates are updated, they may vary from the printed materials below**).

* **Current update: April 2020.** All numbers are approximate estimates and further described in our [FAS Nuclear Notebooks](#) published in the *Bulletin of the Atomic Scientists*, and the World Nuclear Forces overview in the [SIPRI Yearbook](#). Additional reports are published on the [FAS Strategic Security Blog](#). Unlike those “fixed” publications, this web page is updated continuously as new information becomes available, so estimates may differ.

^a Warheads in the “military stockpile” are defined as warheads in the custody of the military and earmarked for use by military forces.

^b The “total inventory” counts warheads in the military stockpile as well as retired, but still intact, warheads awaiting dismantlement.

^c This number is higher than the aggregate data under the [New START treaty](#) because this table also counts bomber weapons at bomber bases as deployed. [Detailed overview of Russian forces as of 2020 is here](#). Numbers have been updated for later changes.

^d All are declared to be in central storage, although some storage sites may be close to bases with operational forces. Several thousand retired non-strategic warheads are awaiting dismantlement.

^e Includes an estimated 870 strategic warheads and all 1,870 non-strategic warheads.

^f In addition to the 4,312 warheads in the military stockpile, an estimated 2,60 retired warheads are thought to be awaiting dismantlement. Details are scarce, but we estimate that Russia is dismantling 200-300 retired warheads per year. [See 2020 overview of Russian forces here](#).

^g This number is higher than the aggregate data released under the [New START data](#) because this table also counts bomber weapons on bomber bases as deployed. [Detailed overview of U.S. forces as of 2020 is here](#).

^h Approximately 150 B61 bombs are deployed in Europe at six bases in five countries (Belgium, Germany, Italy, Netherlands, and Turkey). [For details, see here](#).

ⁱ Non-deployed reserve includes an estimated 1,970 strategic and 80 non-strategic warheads in central storage.

^j The U.S. government [declared](#) in March 2018 that its stockpile included 3,822 warheads as of September 2017. Since then, a small number of warheads are thought to have been retired for an estimated 3,800 remaining in the stockpile.

^k In addition to the roughly 3,800 warheads in the military stockpile and the 2,000 retired warheads awaiting dismantlement, approximately 20,000 plutonium cores (pits) and some 4,000 Canned Assemblies (secondaries) from dismantled warheads are in storage at the Pantex Plant in Texas and Y-12 plant in Tennessee. For a detailed overview of U.S. forces, [see here](#).

^l Weapons for France’s single aircraft carrier are not deployed on the ship under normal circumstances but could be on short notice. Warhead loadings on some submarines missiles have been reduced to increase targeting flexibility. For a detailed overview of French nuclear forces, [see here](#)).

^m China is thought to have “[several hundred warheads](#),” far less than the 1,600-3,000 that has been suggested by some. None of the warheads are thought to be fully deployed but kept in storage under central control. China considers all of its nuclear weapons to be strategic, but the US military calls its medium-and intermediate-range missile non-strategic. The Chinese arsenal is increasing with the

production of new warheads for DF-41, DF-26, and additional JL-2 missiles. [Detailed overview of Chinese forces is here.](#)

ⁿ The number of British warheads on each submarine has been lowered from 48 to 40. This has lowered the number of “operationally available” warheads from 160 to 120. By the mid-2020s, the stockpile will be reduced to “not more than 180.” This reduction is already underway. [Detailed overview of British forces is here.](#)

^o Although Israel has produced enough plutonium for 100-200 warheads, the number of delivery platforms and estimates made by the U.S. intelligence community suggest that the stockpile might include approximately 90 warheads. [Detailed 2014 overview of Israeli forces is here.](#)

^p None of Pakistan’s warheads are thought to be deployed but kept in central storage, most in the southern parts of the country. More warheads are in production. [Detailed overview here.](#)

^q Indian nuclear warheads are not deployed but in central storage. More warheads are in production. [Detailed overview of Indian forces is here.](#)

^r After six nuclear tests, including two of 10-20 kilotons and one of more than 200 kilotons, we estimate that North Korea might have produced sufficient fissile material for roughly 35 warheads, although it is difficult to assess how many warheads may have been assembled or deployed. [Detailed overview of North Korean nuclear capabilities is here.](#)

^s Numbers may not add up due to rounding and uncertainty about the operational status of the four lesser nuclear weapons states and the uncertainty about the size of the total inventories of three of the five initial nuclear powers.

The information available for each country varies greatly, ranging from the most transparent nuclear weapons state (United States) to the most opaque (Israel). Accordingly, while the estimate for the United States is based on “real” numbers, the estimates for several of the other nuclear weapon states are highly uncertain.

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