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U.S. Nuclear Weapons In Europe

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Outline



Current Posture

Mission And Arguments

Recent Operations

Deployment History

98 percent reduction of US nuclear weapons in Europe since peak of 7,300 in 1971; ~150 weapons remain (possibly only 100)

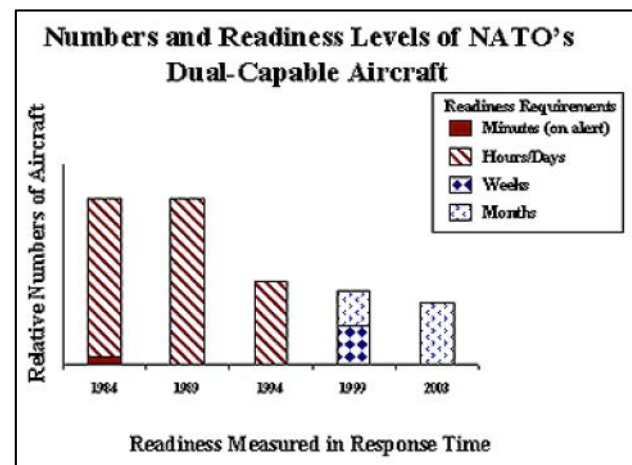
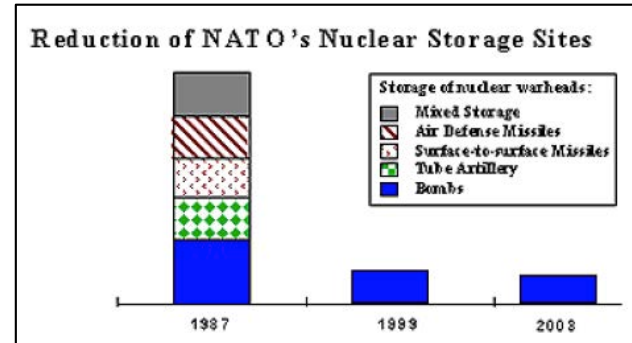
Withdrawal of 12 of 13 weapon systems since 1971

All army, marine corps, navy weapons scrapped

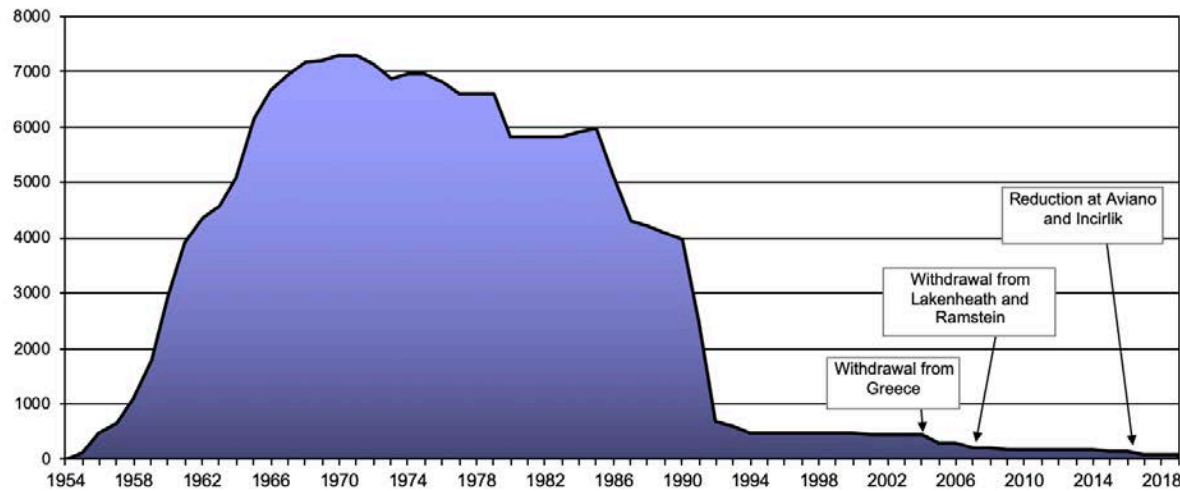
Storage sites reduced to six bases in five countries

Readiness of remaining aircraft reduced from minutes to months

	1971	1981	1987	1991	1999	2003
• Mines	x	x				
• Nike Hercules SAM	x	x	x			
• Honest John SSM	x	x				
• Lance SSM	x	x	x	x		
• Sergeant SSM	x					
• Pershing IA	x	x	x			
• Pershing II				x		
• GLCM				x		
• 155mm Howitzer	x	x	x	x		
• 8-in. Howitzer	x	x	x	x		
• Walleye ASM	x					
• ASW Depth Bombs	x	x	x	x		
• B CA Bombs	x	x	x	x	x	x
Total Systems	11	9	9	5	1	1



U.S. Nuclear Weapons In Europe 1954-2019



Current Deployment

Six bases in five countries have nuclear weapons today

150 weapons remain
(possibly only 100)

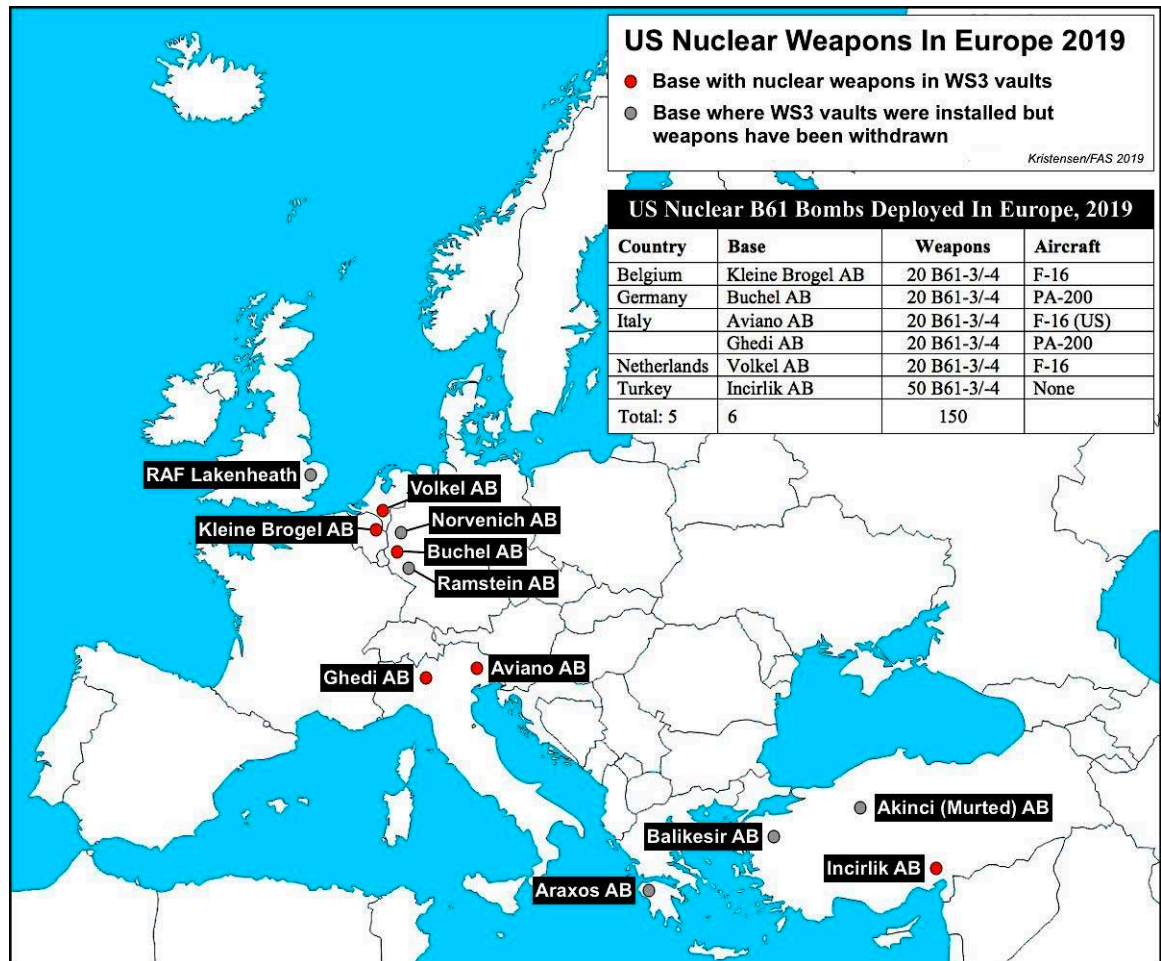
All stored in underground vaults (WS3) inside shelters

Six other bases have empty vaults

Weapons are B61-3/4 gravity bombs

Yields: 0.3 kt – 170 kt (B61-3)
0.3 kt – 50 kt (B61-4)

For delivery by US F-15E/-16 and NATO F-16, PA-200



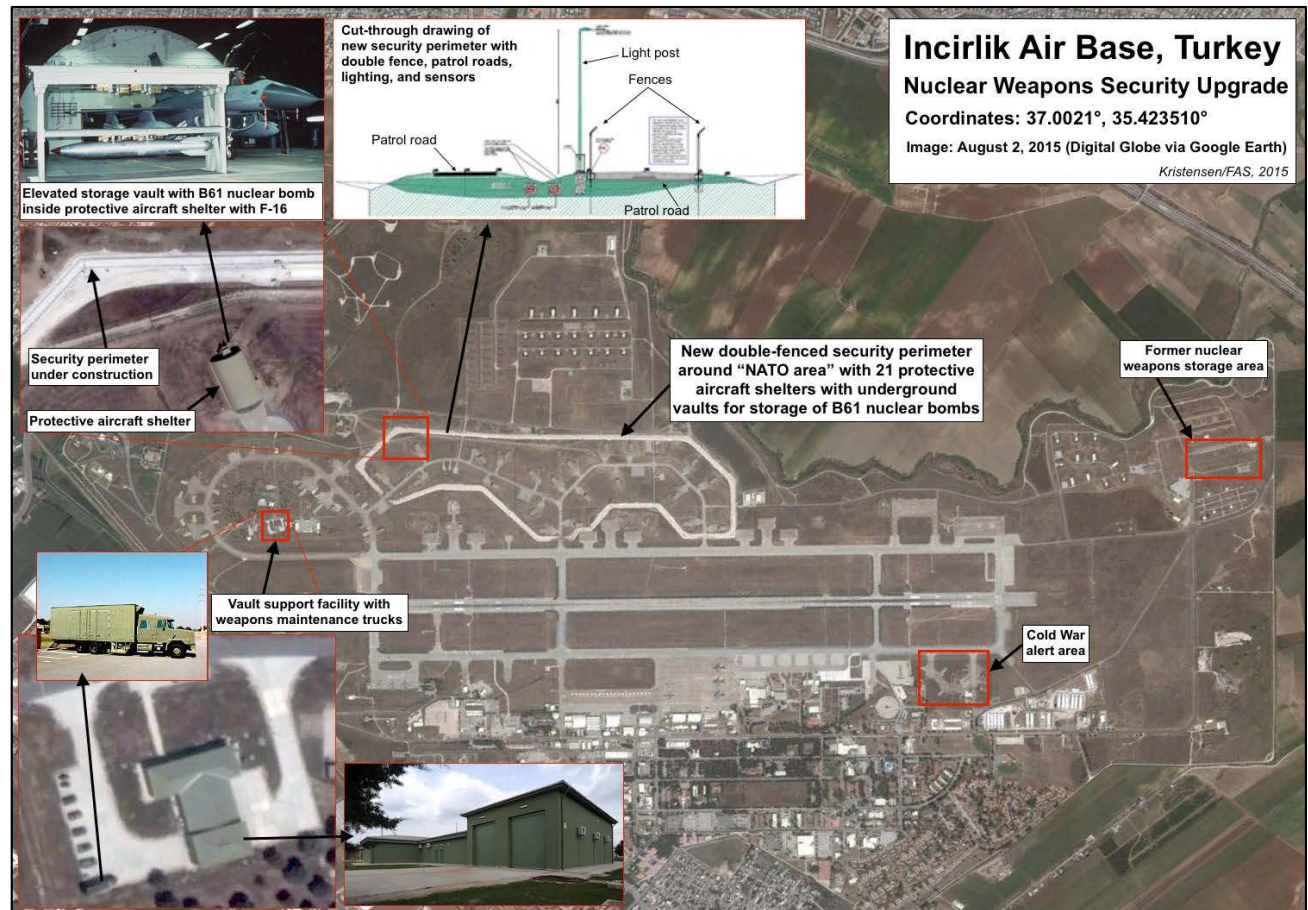
Site Modernization

Upgrade underway of WS3 system at seven (six active) bases in Europe

Security and infrastructure upgrades completed at Aviano and Incirlik in 2014-2015

Incirlik only 68 miles from border with war-torn Syria; Inside Turkey with armed terrorist attacks

Smaller upgrades underway at other bases



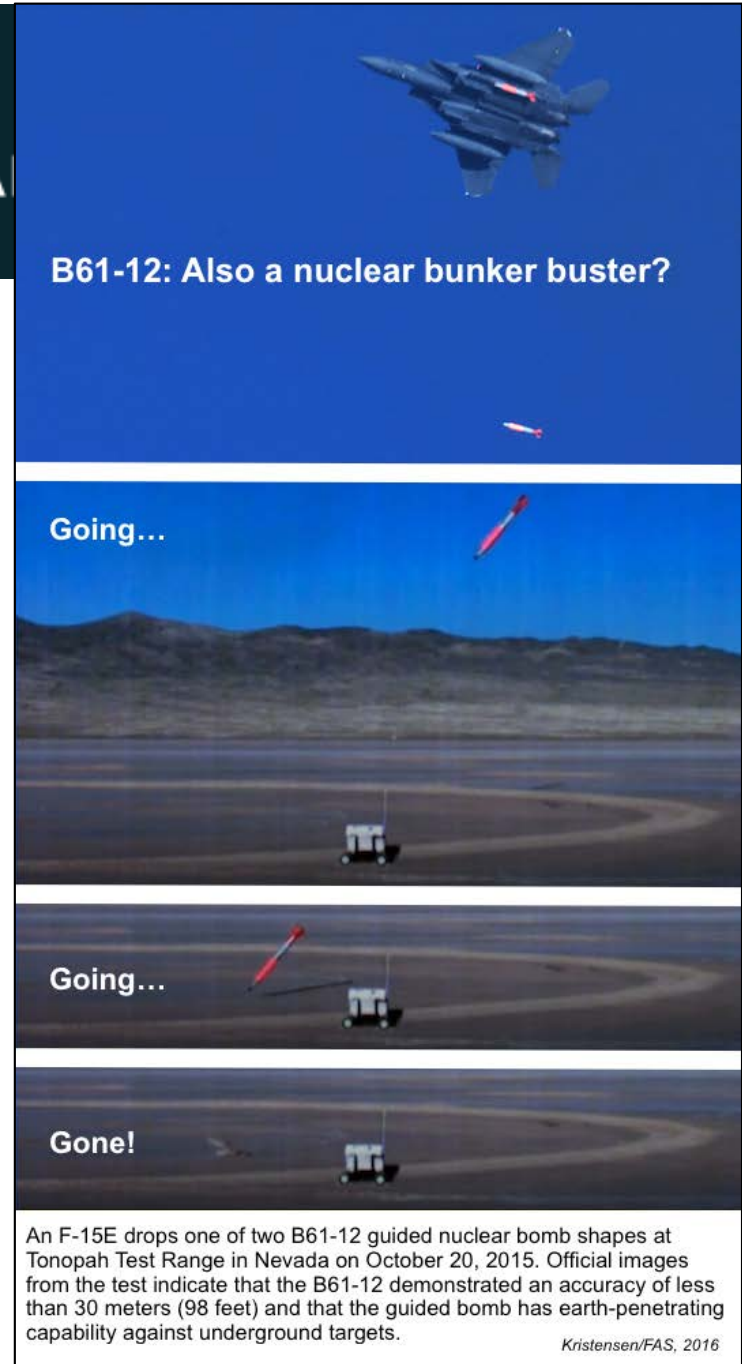
Weapons Modernization

- Modification of B61 bomb from “dumb” bomb to guided, standoff B61-12 with guided tail kit assembly that increases targeting accuracy and efficiency: one type can cover all bomb missions (tactical as well as strategic)*
- B61-12 integration on B-2, B-21, F-15E, F-16, F-35A, Tornado
- B61-12 First Production Unit in 2021; stockpiling from 2024
- B61-12 cost: more than a decade worth of European Reassurance Initiatives
- The B61-12 will replace B61-3, (B61-4), B61-7, (B61-10), B83

* Note: New digital aircraft (B-2, B-21, F-15E, F-35A) will be able to use tail kit for guided employment; older analog aircraft (Tornado, F-16) will use ballistic employment.

“The Air Force tail kit will provide the B61-12 with a measure of improved accuracy **to give the same military capability as the higher yield bombs it replaces.**”

Brian McKeon, OSD, July 28, 2016 (emphasis added)



Nuclear Structure

“NATO is a nuclear alliance...”

Correction: NATO as an institution does not own any nuclear weapons. It is an alliance of mostly non-nuclear weapon states as well as three nuclear-weapon states that under certain circumstances will use their own nuclear weapons to defend member countries against attack.

A predominantly non-nuclear alliance:

- Non-nuclear (NPT) members: 26 (90%)
- Nuclear weapon members: 3
- Nuclear Sharing members: 5 (4?)
- SNOWCAT members: 7

Nearly half (14) do not have a nuclear-related role (other than participating in NPG)

Country	Nuclear State	Nuclear Sharing	SNOW CAT*	NPG	Nuclear Policy
Albania				X	X
Belgium		x		x	x
Bulgaria				x	x
Canada				x	x
Croatia				x	x
Czech Rep.			x	x	x
Denmark			x	x	x
Estonia				x	x
France	x				x
Germany		x		x	x
Greece			x	x	x
Hungary			x	x	x
Iceland				x	x
Italy		x		x	x
Latvia				x	x
Lithuania				x	x
Luxembourg				x	x
Montenegro				X	x
Netherlands		x		x	x
Norway			x	x	x
Poland			x	x	x
Portugal				x	x
Romania			x	x	x
Slovakia				x	x
Slovenia				x	x
Spain				x	x
Turkey		(x)		x	x
United Kingdom	x			x	x
United States	x			x	x
Total	3	5	7	28	29

* SNOWCAT: Support of Nuclear Operations With Conventional Air Tactics (previously Support of Nuclear Operations With Conventional Attacks)

Nuclear Structure

NATO countries with nuclear weapons forces and/or roles*

NATO Member	Nuclear Role	Nuclear Posture
United States	Primary guarantor of ultimate security guarantee. Heads SACEUR. Has traditionally lead/dominated NATO nuclear mission/discussion. Also has nuclear support role in Pacific.	Stockpile of 3,800 nuclear warheads for delivery by Quadrad of long-range bombers, ICBMs, SLBMs, and dual-capable fighter-bombers. Some 150 gravity bombs deployed in Europe at six bases in five countries. Provides nuclear bombs to nuclear sharing members. Supports UK posture (missiles, technology, know-how) and to lesser extent France.
United Kingdom	Has “independent” nuclear force that backs up US role. Previously identified “sub-strategic” support of NATO.	Stockpile of 200 nuclear warheads for delivery by SLBMs.
France	No official role. Nuclear forces not integrated into NATO command structure. Does not participate in NPG.	Stockpile of 300 nuclear warheads for delivery by SLBMs and fighter-bombers.
Belgium	Nuclear strike role as part of nuclear sharing arrangement.	Stockpile of 20 US bombs for delivery by Belgian F-16s.
Germany	Nuclear strike role as part of nuclear sharing arrangement.	Stockpile of 20 US bombs for delivery by German Tornados.
Italy	Nuclear strike role as part of nuclear sharing arrangement.	Stockpile of 20 US bombs for delivery by Italian Tornados.
Netherlands	Nuclear strike role as part of nuclear sharing arrangement.	Stockpile of 20 US bombs for delivery by Dutch F-16s.
Turkey	Possibly still part of nuclear sharing arrangement.	Previous stockpile of 40 US bombs for Turkish aircraft withdrawn.

* Another seven countries participate in SNOWCAT (Czech Republic, Denmark, Greece, Hungary, Norway, Poland, Romania)

Nuclear Policy

Important nuclear language changes in NATO policy documents 1999-2016:

Strategic Concept 1999	Strategic Concept 2010/DDPR 2012	Warsaw Summit Communiqué 2016
<p>“The supreme guarantee of the security of the Allies is provided by the strategic nuclear forces of the Alliance, particularly those of the United States; the independent nuclear forces of the United Kingdom and France, which have a deterrent role of their own, contribute to the overall deterrence and security of the Allies.”</p>	<p>“The supreme guarantee of the security of the Allies is provided by the strategic nuclear forces of the Alliance, particularly those of the United States; the independent strategic nuclear forces of the United Kingdom and France, which have a deterrent role of their own, contribute to the overall deterrence and security of the Allies.”</p>	<p>“The strategic forces of the Alliance, particularly those of the United States, are the supreme guarantee of the security of the Allies. The independent strategic nuclear forces of the United Kingdom and France have a deterrent role of their own and contribute to the overall security of the Alliance.”</p>
<p>“NATO will maintain, at the minimum level consistent with the prevailing security environment, adequate sub-strategic forces based in Europe which will provide an essential link with strategic nuclear forces, reinforcing the transatlantic link. These will consist of dual capable aircraft and a small number of United Kingdom Trident warheads.”</p>	<p>“NAC will task the appropriate committees to develop concepts for how to ensure the broadest possible participation of Allies concerned in their nuclear sharing arrangements, including in case NATO were to decide to reduce its reliance on non-strategic nuclear weapons based in Europe.”</p>	<p>“NATO's nuclear deterrence posture also relies, in part, on United States’ nuclear weapons forward-deployed in Europe and on capabilities and infrastructure provided by Allies concerned.”</p>
<p>“require widespread participation by European Allies involved in collective defense planning in nuclear roles, in peacetime basing of nuclear forces on their territory and in command, control and consultation arrangements.”</p>	<p>“the Alliance’s nuclear force posture currently meets the criteria for an effective deterrence and defense posture.”</p>	<p>“That requires sustained leadership focus and institutional excellence for the nuclear deterrence mission and planning guidance aligned with 21st century requirements. The Alliance will ensure the broadest possible participation of Allies concerned in their agreed nuclear burden-sharing arrangements.”</p>

2014 Wales Summit identified Russia as military adversary; 2016 Warsaw Summit reinvigorated nuclear planning.

Trump Administration Effects

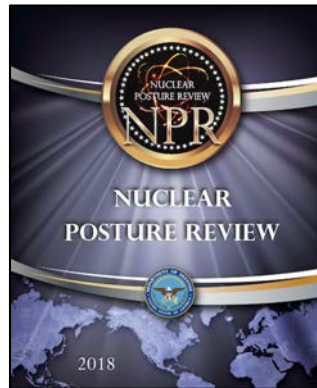
Entered office with “pay up NATO” message

Has alienated European allies and created doubts about US intentions and security commitment

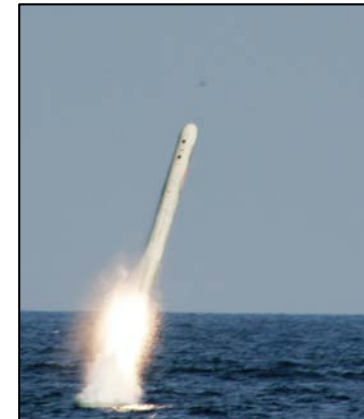
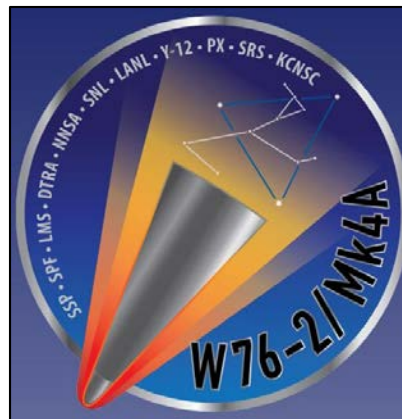
Has published National Security Strategy and Nuclear Posture Review that embrace “great power competition” and strengthens nuclear role

Has withdrawn from INF in conflict with US policy documents and statements and despite NATO preference to stay to pressure Russia

Has created doubts about extension of New START treaty



NPR: Nuclear weapons in Europe are really important but actually not credible. Therefore we need new low-yield Trident and SLCM to stand up to Russian tactical nuclear weapons



Arguments

For deployment

- US nuclear weapons in Europe are important symbols of US security commitments
- Deployment complicates Russian planning
- Nuclear sharing arrangement demonstrates burden-sharing of risks and benefits
- Withdrawing weapons would make it politically difficult to re-deployment them if needed
- Nuclear sharing arrangement gives allies unique influence on US nuclear policy
- Deployment is important because Russia is increasing reliance on its tactical nuclear weapons

Doubtful

- US security commitments are served by strategic forces and conventional deployments
- Russian planning is looks at complete posture
- Most NATO allies are not in burden-sharing arrangement and already share risks + benefits
- If deployment is not politically viable, then it it not beneficial or sustainable
- There is no evidence nuclear-sharing countries have more influence on US nuclear policy
- Russian nuclear strategy is influenced by broader US and NATO security posture and policies

Increased Operations

Since 2014, STRATCOM has integrated bombers more prominently into EUCOM planning

Activation of standing war plan for Europe for first time since Cold War

Increased deployments to Europe

Revival of Cold War-style long-range strike exercises

In 2019 five-aircraft B-52 formation over Norway (right bottom) and three-aircraft B-52 formation over Baltic

Deployment of nuclear-capable fighters to east NATO on exercises (no nukes)

Occasional port visits by SSBNs to UK

Recent Global Thunder STRATCOM exercise focused on Russia scenario

Mixing nuclear and conventional



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QUESTIONS?