

# **U.S. Nuclear Weapons in Europe**

**Presentation by**

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**German Bundestag**

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# Overview

## U.S. Nuclear Weapons in Europe

A Review of Post-Cold War Policy,  
Force Levels, and War Planning

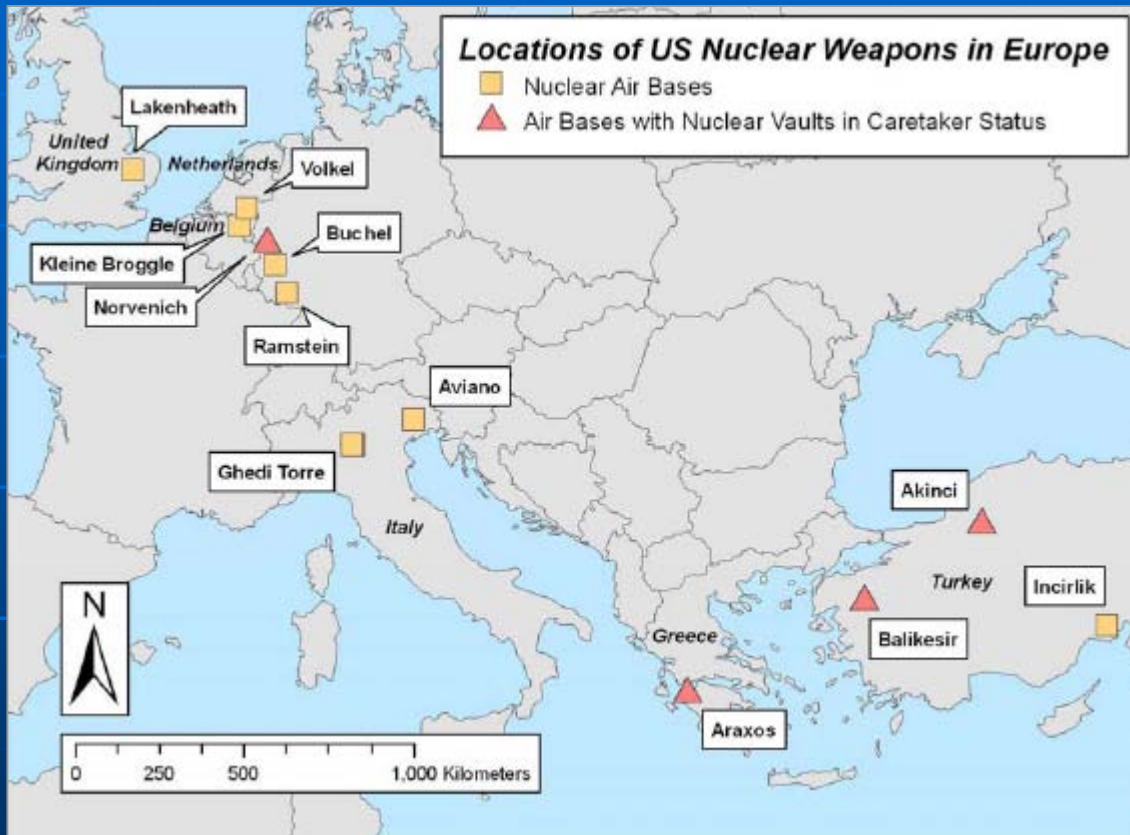


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- Background
- Current deployment
- Nuclear logistics
- Base profiles
- The mission
- Burden-sharing
- Conclusions

# Current deployment



- Roughly 480 bombs
- Widespread deployment to 8 bases in 6 countries
- Four other bases in caretaker status
- Five non-nuclear countries assigned nuclear strike mission

# Current deployment

## U.S. Nuclear Weapons in Europe, 2005

Country	Base	Weapons (B61)		
		US	Host	Total
Belgium	Kleine Brogel AB	0	20	20
Germany	Büchel AB	0	20	20
	Nörvenich AB	0	0	0
	Ramstein AB	90★	40★	130★
Italy	Aviano AB	50	0	50
	Ghedi Torre AB	0	40	40
Netherlands	Volkel AB	0	20	20
Turkey	Akinci AB	0	0	0
	Balikesir AB	0	0	0
	Incirlik AB	50	40	90
United Kingdom	RAF Lakenheath	110	0	110
<b>Total</b>		<b>300</b>	<b>180</b>	<b>480</b>

★ Forty bombs at Ramstein from Memmingen and Araxos may have been returned to the United States.

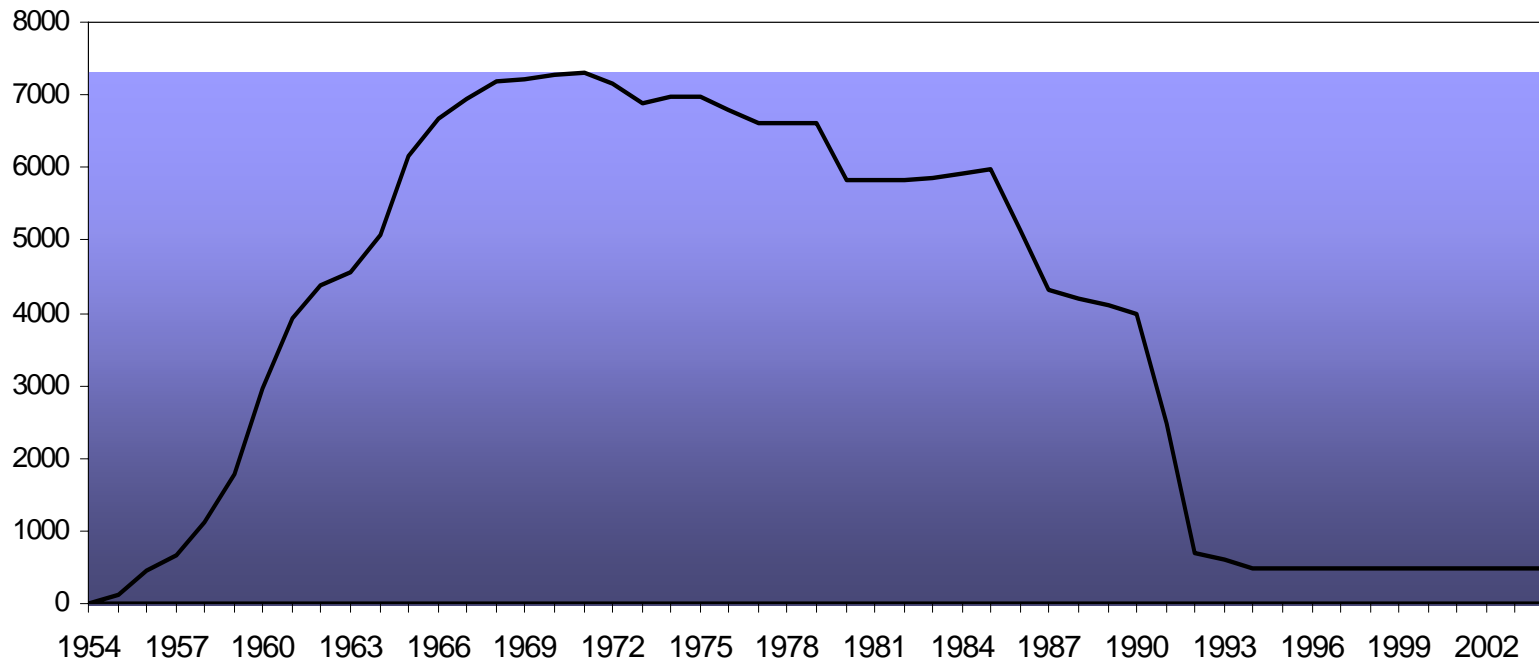
# Current deployment



- B61-3/4/10 mods
- All weapons were modernized in 1998-2003: surety and employment
- New trainer (B61-4 Type 3E) deployed from December 2001

# Current deployment

## US Nuclear Weapons In Europe, 1954-2005



# Nuclear logistics

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## Weapons Storage and Security System (WS3)



# Nuclear logistics

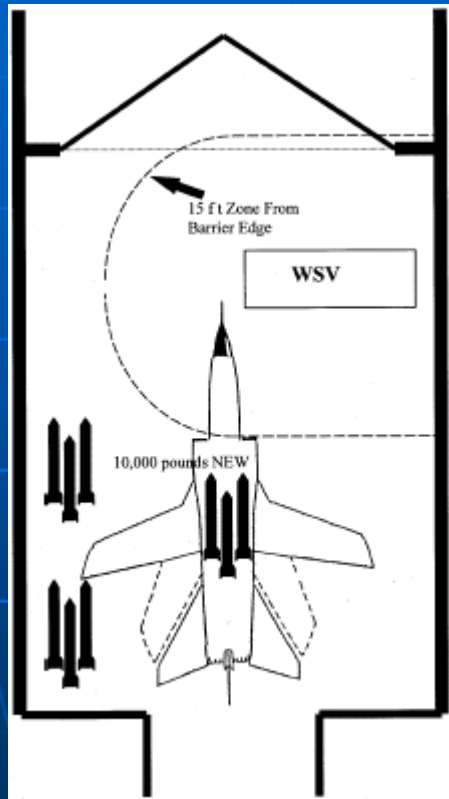
## Weapons Storage and Security System (WS3)

Country	Base	WSV	Max. Capacity
Belgium	Kleine Brogel AB	11	44
Germany <sup>a</sup>	Büchel AB	11	44
	Nörvenich AB <sup>b</sup>	11	44
	Ramstein AB	55 <sup>c</sup>	220
	Araxos AB <sup>b</sup>	6	24
Greece	Araxos AB <sup>b</sup>	6	24
Italy	Aviano AB	18	72
	Ghedi Torre AB	11	44
Netherlands	Volkel AB	11	44
Turkey	Akinci AB <sup>b</sup>	6	24
	Balikesir AB <sup>b</sup>	6	24
	Incirlik AB	25	100
United Kingdom	RAF Lakenheath	33	132
<b>Total</b>		<b>204</b>	<b>816</b>

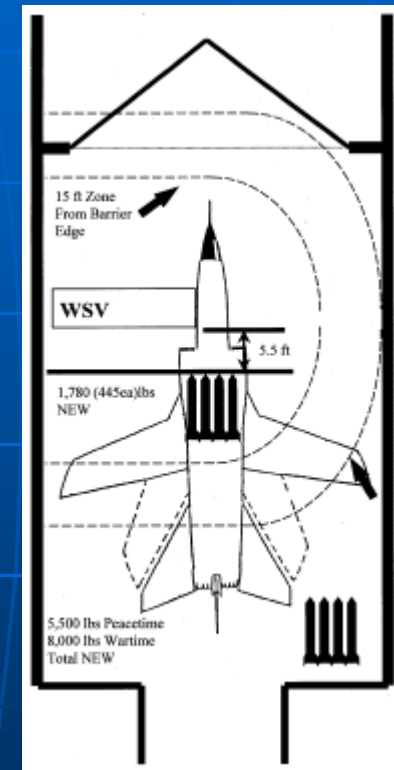
<sup>a</sup> The German air base at Memmingen was closed in 2003.  
<sup>b</sup> The vaults at these bases are in caretaker status with no weapons.  
<sup>c</sup> One of these is thought to be a training vault.



# Nuclear logistics



- Location of Weapons Storage Vaults in Protective Aircraft Shelters (PAS)
- USAF shows two shelter configurations
- Satellite images show mainly two shelter sizes:
  - ~ 37.5 x 23 m
  - ~ 31.5 x 17 m



# Nuclear logistics

## Weapons Maintenance Truck (WMT)



- 14 trucks
- Provide on-site maintenance and repair to B61 bombs
- Established in 1991 as part of the Regionalized Nuclear Weapons Maintenance Concept (RNWMC)

# Nuclear logistics: WMT



- WMT visit PAS to perform weapons maintenance and repair inside shelter

- B61 bomb is partially disassembled inside WMT or next to it inside PAS



# Nuclear logistics: WMT

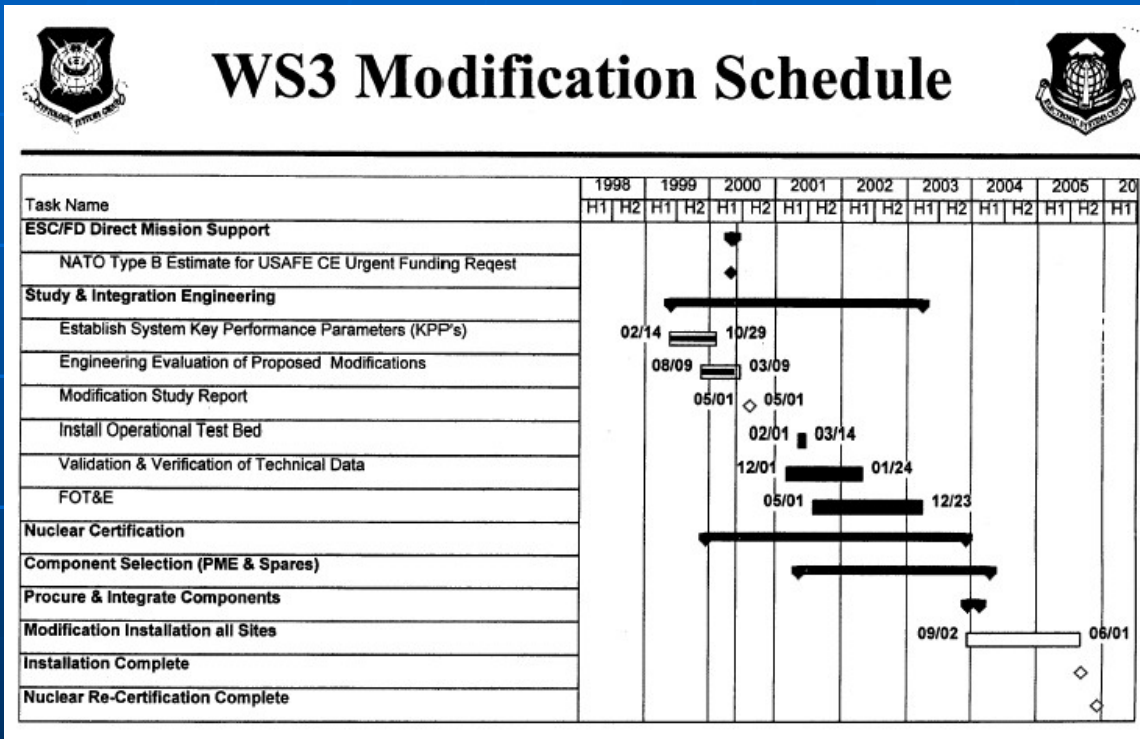


- April 1997: USAF safety review of F-15 and F-16 DCA found:

“It cannot be assured that the B61 meets military characteristics (MC) requirements in abnormal environments when the electrical regions are breached and the nuclear systems remain functional. Under these conditions, *nuclear detonation may occur* if energy capable of initiating the nuclear system is present.”

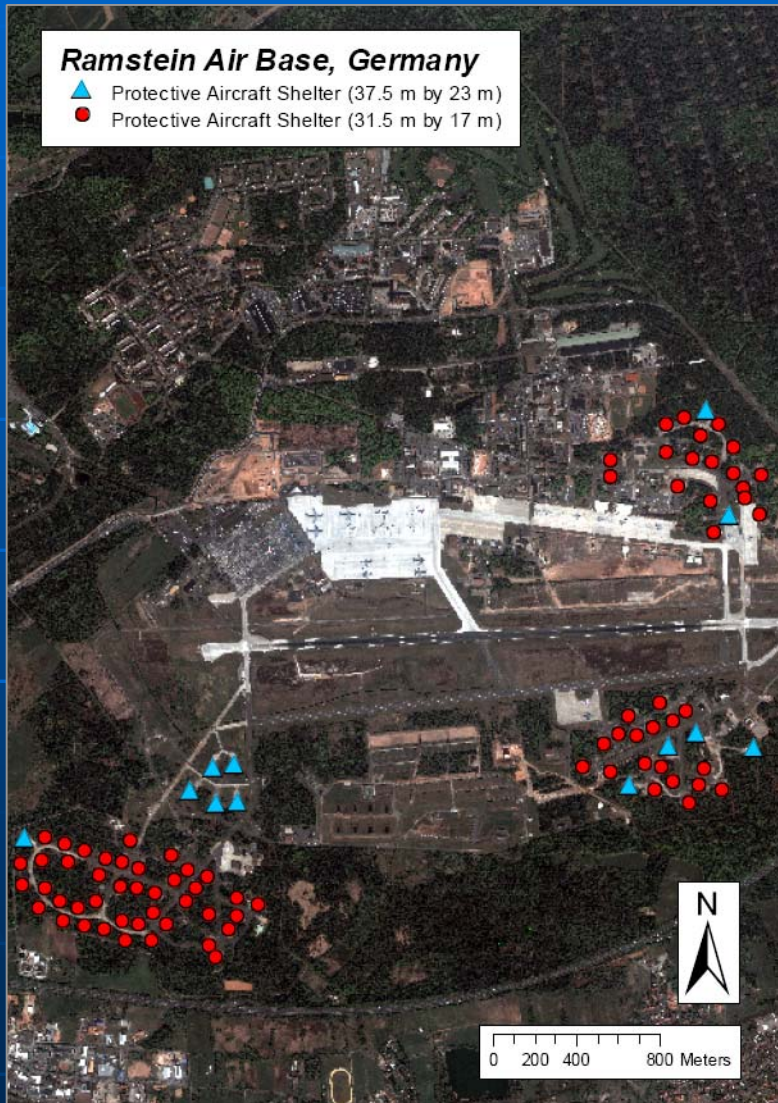
# Nuclear logistics

## WS3 modernization currently underway



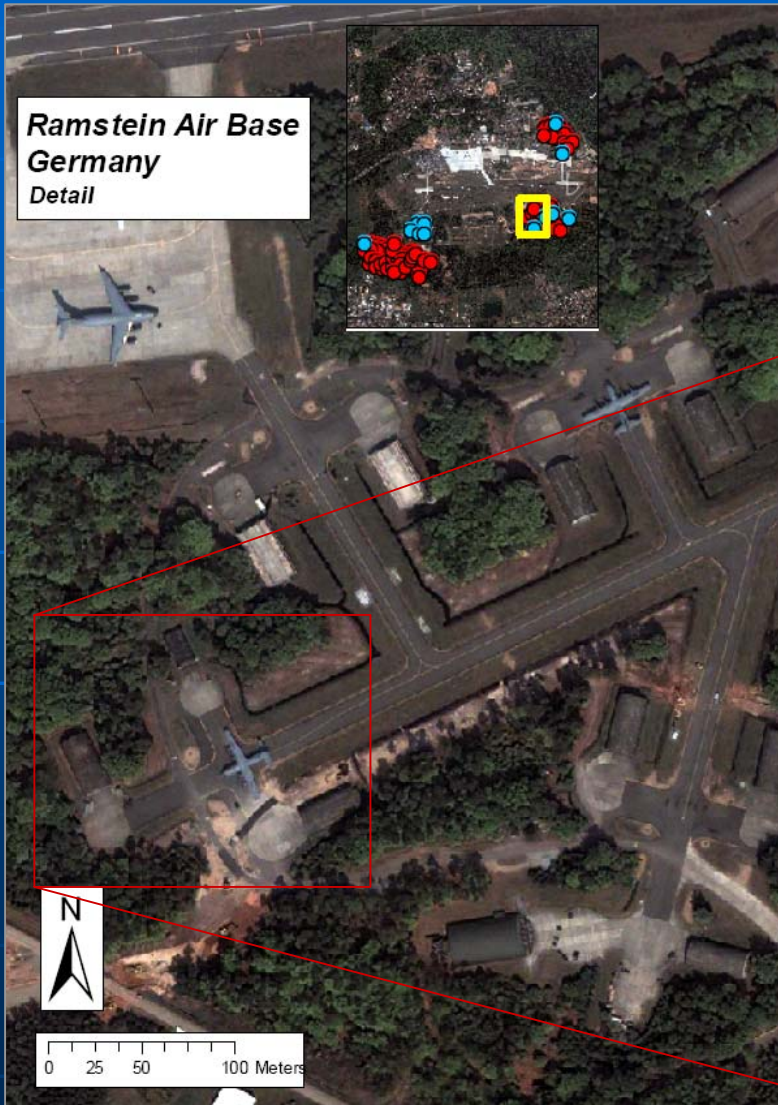
- \$10 million modernization to be completed in 2005
- WS3 sustainment through FY2018
- \$2 million contract in 2004 to upgrade monitoring and console equipment at 12 locations

# Base profiles: Ramstein Air Base



- 90-130 weapons (70-90 for US use and 20-40 for Luftwaffe)
- For 52 FW at Spangdahlem and Jabo G-31 at Nörvenich
- 90 protective aircraft shelters (12 large and 78 smaller)
- 55 weapons storage vaults (one used for training)
- Max capacity: 220 weapons

# Base profiles: Ramstein Air Base



- Date: May 8, 2003
- C-130 Hercules transports among protective aircraft shelters



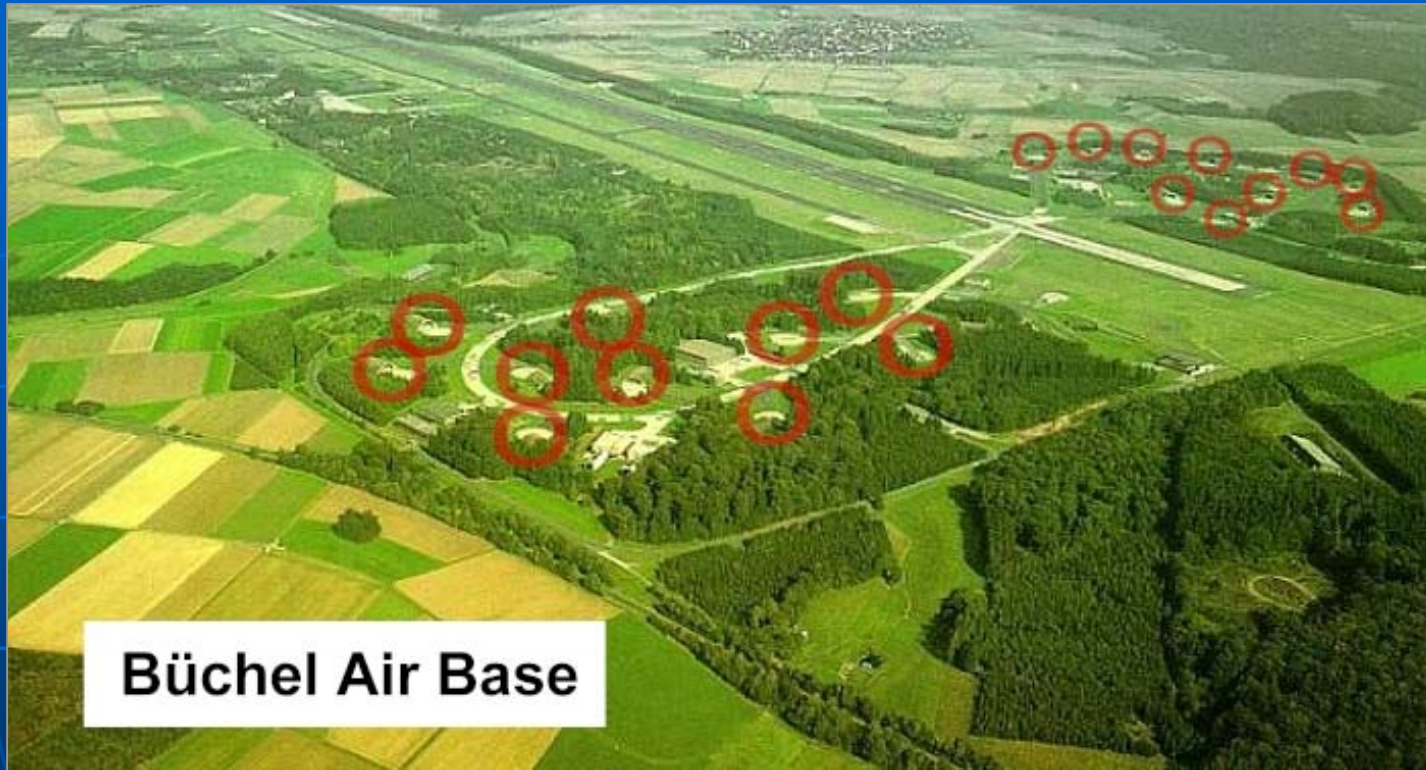
# Base profiles: Büchel Air Base



- Home base of Jabo G-33
- Only German base with nuclear weapons
- U.S. Air Force custodian: 702 MUNSS



# Base profiles: Büchel Air Base



- 11 vaults in protective aircraft shelters
- Max capacity: 44 weapons
- 20 B61 bombs authorized

# The mission

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Three main reasons used for retaining U.S. nuclear weapons in Europe:

- Russia could turn bad and still has a lot of non-strategic nuclear weapons
- Symbol of continued U.S. commitment to NATO: provides trans-Atlantic glue
- Other countries on NATO's southern periphery are developing weapons of mass destruction

# The mission: Russia

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USCINCEUR (December 1997) on nuclear aircraft readiness requirements:

“Russian tactical nuclear weapons and the doctrine to employ them remain a threat to NATO.”

“Russia maintains at least a 3 to 1 advantage in tactical nuclear weapons as compared to the U.S. and a vastly greater advantage over NATO.”

“The Russians enjoy a near 40 to 1 advantage in delivery systems.”

“Significantly, Russian tactics have evolved to lean more heavily than before on tactical nuclear weapons as their conventional force effectiveness has declined.”

# The mission: Institutional glue

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## The 1999 Strategic Concept:

“Nuclear forces based in Europe and committed to NATO provide an essential political and military link between the European and the North American members of the alliance.”

## The 2001 NPG Final Communiqué:

“We emphasize again that nuclear forces based in Europe and committed to NATO continue to provide an essential political and military link between the European and North American members of the alliance.”

# The mission: Proliferators

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USCINCEUR (December 1997) on nuclear aircraft readiness requirements:

“The proliferation of weapons of mass destruction by states within the EUCOM AOR/AOI and their ability to target the capitals of Europe is of growing concern.”

# The mission: Proliferators

Arrangements for use of EUCOM aircraft and weapons outside EUCOM were made in 1994:

**MEMORANDUM FOR THE RECORD**

DEPARTMENT OF DEFENSE  
UNITED STATES STRATEGIC COMMAND

Subject: NSNF Working Group Meeting Minutes

29 Mar 94

(U) JSCP Annex C guidance governing the theater CINC's requirements when requesting preplanned targeting outside their own AOR is necessary. Action: Provide draft guidance for inclusion into Change 4 to JSCP Annex C. OPR: JS13, CDR [REDACTED] Due: 4 Apr 94.

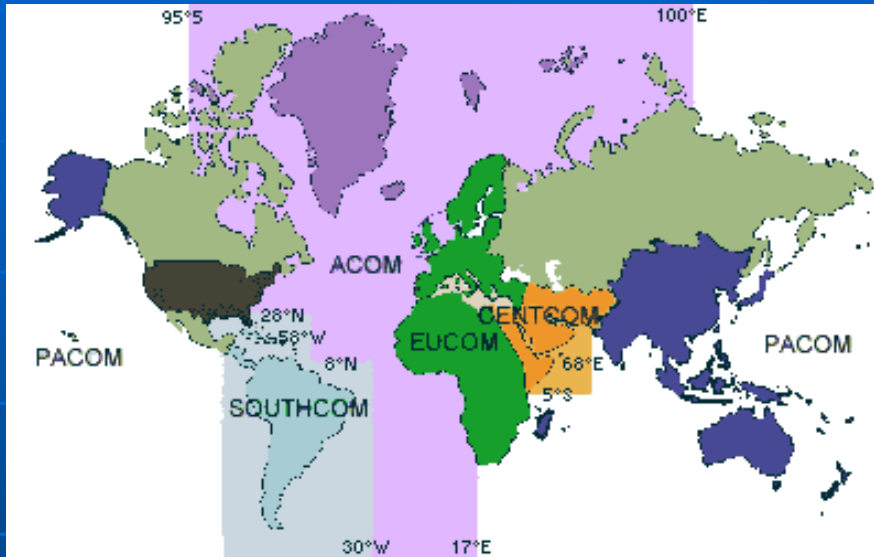
10 May 94

(7) (U) It was agreed that centralized PAL management discussed in the Theater Nuclear support model could be implemented in the short-term with the exchange of PAL materials between STRATCOM and EUCOM (for missions not executed from CINCEUR's AOR using CINCEUR delivery platforms/weapons).

Partially declassified and released under the Freedom of Information Act.

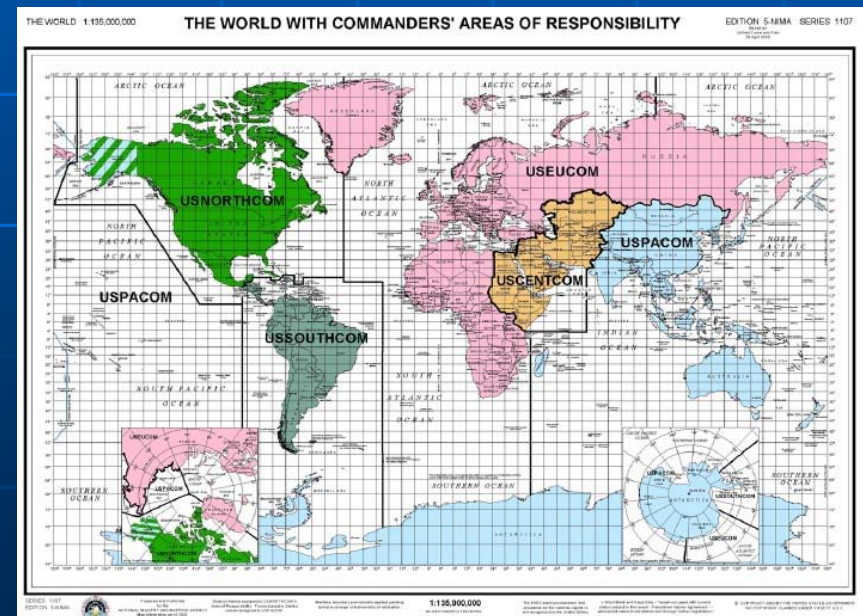
EUCOM now supports CENTCOM nuclear mission (Iran/Syria).

# The mission

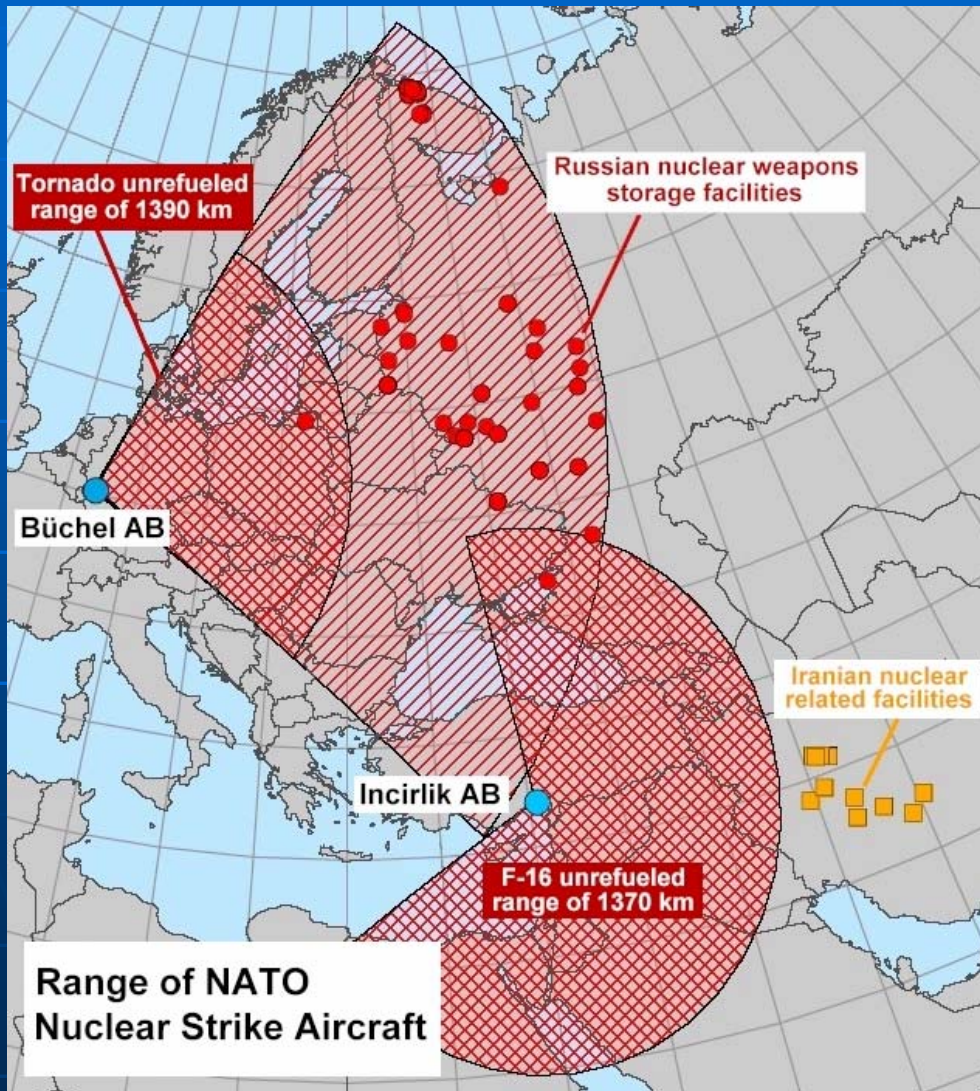


- 1990s: EUROM area of responsibility

- 2001-: EUROM area of responsibility now includes all of Russia



# The mission



## Range of fighter bombers:

- With 1390 km unrefueled combat range, PA-200 Tornado from Büchel can reach into Belarus (double range for illustration)
- With 1370 unrefueled combat range with two bombs, F-16 from Incirlik can reach into Iran and southern Russia



# The end of burden-sharing?



- Quiet removal of nuclear weapons from Greece in 2001
- Contradicts 1999 Strategic Concept and numerous NPG statements
- Suggests that host nations can withdraw from nuclear burden-sharing with no negative consequences to NATO's ability to deter or alliance unity
- Greece withdrawal follows Canada in 1984; now Belgium, Germany, Italy, Netherlands and Turkey can follow

# The problems with continued deployment

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- Perpetuates Cold War hostile relationship between Russia and NATO/United States
- Prevents progress on addressing non-strategic nuclear weapons issue
- Undercuts U.S./European efforts to persuade Iran to abandon nuclear weapons by creating double standard
- Inconsistent with articles I, II, and VI of the NPT
- Contradicts “additional steps” from 2000 NPT review conference and 2004 U.N. resolution 59-76 to reduce non-strategic nuclear weapons
- It is unnecessary: nuclear bombs can be delivered from the U.S. or redeployed to Europe in a crisis and do not need to be forward deployed

# Perspectives and priorities

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- Cold War ended 15 years ago
- NATO focus is non-proliferation, peacekeeping, and transforming to “new” security alliance. Nuclear deterrence is *not* a priority
- Russia is supposed to be a partner
- Russian tactical nuclear weapons must be brought under control and transparency increased
- Iran and others are to be persuaded not to develop nuclear weapons
- The NPT regime is essential and must be strengthened
- Forward-deployment of U.S. nuclear weapons in Europe is “old NATO”