### **ORG Explains #6**

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### **UK-US Defence and Security Relations**

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#### Subject:

This primer explains the legal and institutional basis of current defence and security relations between the United Kingdom and the United States, including cooperation on nuclear weapons, intelligence-sharing, conventional forces and weapons development and procurement.

#### Context:

The "special relationship" between the United Kingdom and the United States is often referenced by politicians but the reality behind the rhetoric is little understood. While the warmth of personal relationships between prime ministers and presidents may wax and wane, a series of complex and often opaque institutional relationships and infrastructure bind the two countries' defence and security sectors more closely together than to any other partners. The UK is likely to remain the US' most capable and valued military and intelligence ally for some time to come, but the relationship is inherently asymmetric given that Washington deploys resources around ten times larger than London's. This has very significant impact on the independence of the UK's conventional and nuclear military forces as well as its involvement in global mass surveillance operations. As with the economic and legal relationship between the UK and the European Union, unravelling the defence and security relationship with the United States would likely be complex and expensive.

#### **Key points:**

- The UK and US are bound together legally by the multilateral NATO Charter and a series of bilateral agreements over exchange of intelligence and technology.
- Cooperation between the UK and US on nuclear weapons development, manufacture and testing is unprecedented and may breach Non-Proliferation Treaty (NPT) obligations.
- Intelligence-sharing is probably the closest institutional relationship and provides the US with access to a global network of mass surveillance facilities in the UK and British Overseas Territories.
- The US military also uses several air and naval bases in the UK and overseas territories, notably for supporting nuclearcapable strategic bombers and submarines.
- British desire to be a "full-spectrum" military partner to the US at least partially determines the structure of UK forces, including a deployable Army division, aircraft carriers and nuclear weapons.
- The UK is the US' closest military industrial and scientific partner, not least in the F-35 Joint Strike Fighter project. While the British military is increasingly reliant on imports from the US, British industry partners at least as much with European as with US peers.

# What is the legal basis of UK-US defence and security relations?

Despite enjoying what the UK Ministry of Defence calls "the broadest, deepest and most advanced [defence and security relationship] of any two countries", the United Kingdom and United States have no bilateral defence treaty. Instead, the legal basis of their relations is the multilateral NATO Charter and a series of agreements relating more specifically to intelligence and nuclear capabilities sharing.

The British-US Communication Intelligence Agreement (known as **UKUSA**, **1946**) is the secret (until 2010) agreement governing intelligence-sharing between the UK and US plus Canada (1948), Australia and New Zealand (both 1956). This alliance is commonly known as **Five Eyes** and comprises by far the world's largest network for gathering and sharing electronic and signals intelligence from posts in the five members and their overseas territories. This mass surveillance network is known as ECHELON.

The North Atlantic Treaty (1949) is the legal basis for UK-US mutual defence obligations within NATO. This prescribes the geographical area of mutual defence as Europe, the Mediterranean, the North Atlantic and North America. It thus does not bind the UK to defend Hawaii or US territories in the Pacific; nor does it bind the US to defend British Overseas Territories other than Gibraltar, Cyprus bases and Bermuda.

The so-called **Mutual Defence Agreement** (1958) is not a mutual defence treaty but an agreement permitting the US and UK to share critical information and materiel required for the manufacture of nuclear weapons and delivery systems. This has included nuclear propulsion systems for submarines and plutonium. The critical article of the Agreement (III *bis*) is revised and renewed every 10 years. No other two nuclear weapons states have such an agreement and it is debatable whether the transfer of nuclear weapons technologies and materials is not

contrary to the Nuclear Non-Proliferation Treaty (NPT), in force since 1970.

The Polaris Sales Agreement (1963) is the other pillar of UK-US nuclear cooperation. It secured the supply to the UK of submarine-launched Polaris missiles, including launch tubes and guidance system. The agreement was updated in 1982 to cover the next generation Trident missile system and remains in force.

The **Defence Trade Co-operation Treaty** (2007) removes the need for specific authorisation of many defence equipment sales between the two countries and allows the transfer of certain sensitive technologies to facilitate the joint development of new weapons. This seems to have been motivated by the British need for rapid delivery of equipment for use in coalition operations in Iraq and Afghanistan as well as the needs of the US-led F-35 Joint Strike Fighter programme for trans-Atlantic cooperation. Only Australia also has such an arrangement with the US.

# What are the priority areas for UK-US defence and security cooperation?

While the UK and US cooperate on virtually every element of their defence and security policies, the key areas are intelligence collection and sharing, nuclear weapons, naval and special forces.

The greatest value to the US from the relationship would seem to be British capabilities for intelligence collection, including strategically positioned electronic listening posts on British Overseas Territories in the Mediterranean, Indian and South Atlantic Oceans. While the US is very much the dominant partner in Five Eyes, it relies heavily on British inputs. Similarly, mainland Britain is an important node relaying military and intelligence communications between the US and Europe, Africa and the Middle East. The key relationship is between the US National Security Agency (NSA) and the UK Government Communications Headquarters (GCHQ).

Perhaps the greatest value to the UK from the relationship derives from US technical assistance to its **nuclear weapons** programme. Thus, the US covers most of the development costs of the Trident intercontinental ballistic missile (ICBM), while the UK designs its own ballistic missile submarines (around the USbuilt common missile compartment) and nuclear warheads. The 2014 renewal of the Mutual Defence Agreement also appeared to include revision to allow the US to supply technology needed by the UK to develop a nuclear propulsion system for its new Dreadnought class submarines. While the UK probably has the technical capacity to follow France in developing its own ICBMs and all aspects of its nuclear submarines, this would entail an additional cost of billions of pounds.

The US gains by recovering a less significant share of its development costs via British participation. It may feel it benefits more from the political dimension of a closely coordinated nuclear alliance, for example in its approach to international nuclear disarmament initiatives.

Contrary to some accounts, the US is unlikely to be able to prevent the UK from launching its Trident missiles, nor to over-ride their guidance in-flight. However, it is difficult to imagine the UK using its nuclear weapons without coordination with Washington.

The other important dimension of strategic weapons in the relationship is the designated use of British air bases in the UK and Diego Garcia atoll by the US Air Force (USAF) for forward deploying nuclear bombers. No other country currently provides such basing, although several European countries do host US tactical nuclear weapons and strike aircraft. The UK is also able to support US nuclear-armed submarines in Scotland if necessary.

Conventional military forces are of lesser significance in the relationship but there is a still a very close relationship, especially in

terms of naval forces and special forces. All UK armed forces are designed and trained to be interoperable with US forces.

The priority for US-UK naval cooperation is bringing the two new British aircraft carriers and their F-35B airwings into operation. While the UK has designed and built its own carriers, it is dependent on US support to develop, build and bring the aircraft into service. Thus, British F-35B pilots train in the US and the carriers will, for at least their first few years, operate mixed squadrons of UK and US Marine Corps F-35B. The deployment of Royal Navy carrier strike groups will be coordinated with deployment of US carriers and likely include at least one US Navy destroyer.

The other big area of naval cooperation is operations to **control sea lanes**, not least those on key oil-supply routes, such as the Red Sea-Gulf of Aden-Arabian Sea-Persian Gulf. There, the two countries command (US) and deputy command (UK) multinational Combined Task Forces from their adjacent HQs in Bahrain. Similar imperatives drive the US desire for the Royal Navy (and others) to revive its presence in the South China Sea, where China has established air and naval bases.

UK and US nuclear attack submarines also have a unique ability to work together in **antisubmarine warfare** tasks under the Arctic icecap. Such cooperation has been revived since 2016 in response to Russian activity and greater cooperation (with Norway) is planned as the RAF brings its new P-8A aircraft into service from 2019.

Land forces cooperation may be of lesser importance at present. While the MoD appears to base its Army structure at least partly on the desire to contribute a division-sized formation (15,000+ personnel) to coalition operations, as it did in both Iraq wars, its actual capacity to do this is now widely doubted. Moreover, the US itself has deprioritised the kind of major land offensives that might require such reinforcement.

Instead, UK **Special Forces** have been deeply integrated with US Special Forces in covert operations from Afghanistan to Libya but especially in Iraq and Syria. Close air force cooperation in operations of armed drones and other intelligence, surveillance and reconnaissance (ISR) aircraft (of which the UK is the only major operator in European NATO) is also key to this relationship.

## Does the US have military bases in the UK and its Overseas Territories?

The United States has a major standing presence of forces in the United Kingdom and uses at least four British Overseas Territories for military and intelligence operations on a more or less permanent basis. The focus is very much on the USAF and the NSA.

**USAF bases** in the UK (all owned by the RAF) operating or supporting aircraft include:

RAF Fairford in Gloucestershire is the only air base in Europe designated to support US strategic bombers, including B-1B, B-2 and B-52 aircraft. Since 2010 the base has been a standby facility, with no aircraft permanently based there. It is regularly used for military exercises.

**RAF Lakenheath** in Suffolk is the main US combat air base in Europe. It hosts one squadron of F-15C long-range fighter and two of F-15E strike aircraft, representing about half of US combat aircraft still based in Europe. These are due to be replaced by F-35A strike fighters in coming years. Until 2008, tactical nuclear weapons were stored at the base.

RAF Mildenhall (adjacent to Lakenheath) hosts the main USAF aerial refuelling capability in Europe with KC-135R Stratotanker aircraft. These are to support US and NATO aircraft deployed in the UK, Germany, Italy and elsewhere. The base also hosts a Special Operations Wing with MC-130J Commando II and CV-22 Osprey aircraft to transport and extract US Special Forces around Europe, Africa and the Middle East. Mildenhall is also a

hub for strategic ISR operations with variants of the RC-135 Rivet Joint aircraft. The base is formally scheduled for closure by 2023, but this is understood to be under review by the Trump administration.

**RAF Welford** in Berkshire is a munitions storage facility. The US has based only conventional weapons in the UK for the last decade.

**RAF Waddington** is also known to be used by USAF for remotely piloting unmanned aircraft ('drones') used in operations in the Middle East and Africa.

**Intelligence and monitoring facilities** in the UK known to be operated by or in conjunction with the NSA include:

**GCHQ Bude** in Cornwall is a satellite ground station and electronic communications monitoring facility.

RAF Croughton in Northamptonshire is the USAF-run military and intelligence communications hub between the US, Europe and Africa. It will soon host the Joint Intelligence Operations Center Europe Analytic Center (JAC), 'fusing' US intelligence with the UK and NATO allies. It is currently incorporating units from the closing US bases at RAF Alconbury and RAF Molesworth.

**RAF Fylingdales** in North Yorkshire is a UK-US facility for ballistic missile early warning.

**RAF Menwith Hill** in North Yorkshire is a vast electronic communications monitoring facility operated in conjunction with GCHQ and critical to ECHELON.

There are now no **US Navy bases** in the UK but US nuclear submarines have use of two facilities in western Scotland:

**HM Naval Base Clyde** is the home of all UK submarines and frequently hosts visiting US nuclear submarines. Nearby **Holy Loch** was a base for US ballistic missile submarines from 1961 to 1992.

**Loch Ewe** in Wester Ross has a tiny facility designated for repair or resupply of NATO (US, French) nuclear submarines.

In addition, the US military and NSA use bases in several **British overseas territories**:

**Ascension Island** in the South Atlantic hosts a NSA/GCHQ satellite tracking and electronic surveillance facility.

**Bermuda** is used occasionally by US Navy P-8A Poseidon anti-submarine warfare aircraft operating in the western Atlantic. The US Naval Air Station there closed in 1995.

Diego Garcia atoll in the **British Indian Ocean Territory** is leased to the US Navy and hosts a major air base used sporadically by USAF strategic bombers against targets in Asia. It is also used as a strategic transport base by the Navy and USAF and reportedly hosts a NSA communications and surveillance facility.

RAF Akrotiri in the **Sovereign Base Areas**, Cyprus is used periodically by USAF aircraft, especially reconnaissance aircraft operating over the Middle East. Ayios Nikolaos Station at Dhekelia is a British-run electronic surveillance facility within 200 km of Syria and Lebanon, available to the NSA.

The Royal Navy's Mediterranean operating base at **Gibraltar** is also used occasionally by US Navy nuclear-powered submarines passing in and out of the Strait but hosts no standing US deployments.

In addition, GCHQ facilities in **Kenya** and **Oman** are also reportedly linked into the ECHELON intelligence network.

### Does the UK use or share US military bases?

The UK does not have any of its own bases on US territory. However, in addition to seconded personnel and those in training exercises, it does have some personnel and equipment located temporarily at US bases. These include the Trident Training Facility, Defensive Ordnance Support Facility and Trident Refit

Facility at **King's Bay Naval Base**, Georgia in support of the Vanguard-class ballistic missile submarines and their weapons.

Also important is the presence of RAF and Royal Navy personnel involved in operationalising the UK's F-35B aircraft at Edwards Air Force Base, California and Naval Air Station Patuxent River, Maryland. RAF personnel also remotely pilot both RAF and USAF MQ-9 Reaper aircraft from Creech Air Force Base in Nevada.

Outside the US, UK forces do share many foreign facilities primarily operated by the US military. Examples include Al-Udeid Air Base in Qatar and various bases in Iraq and Afghanistan.

## Are US and UK military personnel 'embedded' in each other's armed forces?

About 140 British military personnel are 'embedded' within allied armed forces, meaning that they fall under that state's normal chain of command. Of these, 49 (as of 31 March 2018) were within US forces and another 36 within coalition HQs, which probably means under de facto US command.

While the number is small, and mostly in HQ/staff roles, UK personnel embedded in US forces are known to have fulfilled key operational roles like piloting (in cockpit or remotely) US combat aircraft in Syria. The total number presumably also excludes UK special forces, on which the government does not comment, where embedding is common.

It is unclear how many US personnel are embedded within the British Armed Forces.

# How close is the UK-US relationship in terms of military research and procurement?

The UK and the US are each other's closest partners in developing new weapons. Apart from the unparalleled cooperation on nuclear weapons, the stand-out area is the Lockheed-Martin **F-35 Joint Strike Fighter**, the biggest

arms procurement project in history. The UK is the only Tier 1 partner in the project, meaning that a reported 15% (by value) of each of 3,000+ planned F-35s will be constructed in Britain. London secured this commitment by investing heavily in the project at an early stage and committing to buy quantities (138) of the 5<sup>th</sup> generation fighter second only to the US. This makes it hard for the British government to reduce its planned procurement of F-35s despite it being unable to budget for them at present.

BAE Systems, which is the main UK contractor on the F-35, is a key player in the trans-Atlantic relationship. By far the UK's largest military industrial company, it also has a huge US-based operation and now sells more to the US market than to the UK. That said, the relationship is asymmetric in that the US buys relatively little from the UK while the UK is increasingly reliant on military imports from the US. BAE also works at least as closely with European peers, for example Leonardo (Italy) and Airbus (France, Germany, Spain) in developing fighter aircraft and missiles.

Policy shifts since 2010 have seen the MoD shift to buying major new equipment off-the-shelf rather than pursue the slower and riskier option of developing or even manufacturing bespoke weapons platforms domestically. This has tended to advantage US suppliers, including Boeing (P-8A anti-submarine aircraft and AH-64E Apache attack helicopter), General Atomics (MQ-9B 'Protector' drone) and Oshkosh (armoured vehicles).

# How do UK relations with the US compare with other states?

The State Department lists another 54 states with which the US has collective defence arrangements. For all the strategic shifts in US armed forces deployments from Europe to the Pacific, none of these countries yet comes close to matching its defence and security partnership with the UK.

Australia is perhaps the closest comparator, being deeply integrated into the Five Eyes intelligence network and special forces operations, hosting increasing numbers of US forces, buying the most sophisticated US military products and being the only other country to have a defence trade cooperation treaty. While it shares a similar outlook to the US and UK, its armed forces are much smaller than the UK's and lack capabilities like aircraft carriers and nuclear submarines.

Canada similarly has an integrated intelligence arrangement and, uniquely, an integrated continental air defence network but its strategic outlook is quite different to the US and UK, its armed forces much smaller, and industrial relations weak.

France is the only other nuclear-armed ally of the United States, and of very similar capabilities to the UK, with many overseas territories. But it has a far more independent outlook on "strategic autonomy", particularly as regards its nuclear weapons and industrial policy. It is also has a far weaker intelligence relationship.

Japan and South Korea have far larger militaries than the UK and host larger concentrations of US forces, as does Germany. However, Japan and Germany force limited constitutionally in their deployments. South Korea is very much oriented to defending against the North. Turkey, the US ally with the largest military in Europe, is similarly occupied with disputes with its neighbours.

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