

Speech: Defence Secretary Michael Fallon at Faslane

It is a huge pleasure to welcome Permanent and Military Representatives of NATO to Her Majesty's Naval Base Clyde.

Our nation's commitment to the Alliance – the bedrock of our defence – remains absolute.

In the past year alone we've increased our NATO efforts: policing Black Sea skies, leading half of its maritime missions and upping our efforts to mentor Afghan officers. And today, our Prime Minister is in Estonia visiting the 800 UK troops who, supported by our French and Danish allies, are leading NATO's Enhanced Forward Presence providing vital reassurance to our Eastern European allies.

But there's no greater illustration of our commitment to NATO which, after all, remains a nuclear alliance than our investment in the UK's independent nuclear deterrent submarine force. And today, we mark the milestone of its 350th patrol at its home base.

So, before I continue, I would like to thank our brave submariners and our submarine enterprise as a whole. For almost 50 years their efforts and those of their forebears have kept us safe every hour of every day. They remain the ultimate guarantors of our security.

And this event offers us a unique opportunity to remind ourselves why our nuclear programme remains so significant.

Protect Our People

First, it's about protecting our people. Our nuclear deterrent remains our only defence against the most extreme threats to our way of life.

Those threats are intensifying whether they come from North Korea's latest nuclear testing setting off a hydrogen bomb, launching ballistic missiles and reinforcing her reckless defiance of the international community. Or Russia, which not content with aggression in Ukraine and Crimea, has over the last few years repeatedly ramped up its nuclear rhetoric and in its latest exercise involving some 50,000 troops massed on the borders of Eastern Europe will also test nuclear capable ballistic missiles.

Now the UK remains firmly committed to the long term goal of a world without nuclear weapons. As Secretary of State, I reduced the number of deployed warheads on each submarine from 48 to 40 and the number of operationally available warheads to no more than 120. Just as we remain committed to reducing our overall stockpile of nuclear warheads to no more than 180 by the mid-2020s.

Yet, at the same time, we remain realistic. The total number of nuclear weapons in the world did not suddenly fall. Much as we would love to live in a world without nuclear weapons. We cannot uninvent them.

Our deterrent ensures our adversaries are left in no doubt that the benefits of any attack will be vastly outweighed by the consequences.

No credible alternative exists. And we see no reason to change our posture.

Protect Our Alliance

But this brings me back to the point at which I started.

Our nuclear deterrent isn't just essential for our security. it's essential for NATO's security as well. It forms one of the Alliance's key centres of decision making that complicates the calculations of our adversaries.

What is more, many nations, represented here today signed the Non-Proliferation Treaty (NPT) in the late 1960s, safe in the knowledge they were covered by NATO's nuclear umbrella including the United Kingdom deterrent. Not only did that deal help halt the nuclear arms race at the time, it has helped to cut the world's nuclear stockpile by 85%.

It is no coincidence there hasn't been a major conflict involving nuclear powered states since the end of the Second World War.

Protect Our Future

Finally, our independent deterrent is a promise to protect our future. We don't know what threats lie around the corner.

Yet by giving the next generation every means necessary – from the conventional though to the nuclear – to deal with whatever comes round the corner.

We are strengthening their hand ensuring that they will have the means to deter potential threats into the 2040s, 2050s, 2060s and beyond.

That is why today we're building four Dreadnought class submarines which will enter service in the early 2030's.

That is why we're continuing to spend £1.3Bn over the next three years on facilities here at Faslane. And that is why we are building on the incredible advanced manufacturing skills found across Scotland to transform this base into a Royal Navy submarine centre of specialisation a base for all UK submarines providing 6,800 jobs now and 8,200 in the future.

Conclusion

So I hope you find your visit instructive and informative.

You can rely on the UK to remain not just 100 per cent committed to our NATO alliance but 100 per cent committed to our deterrent – a message Parliament confirmed overwhelmingly last year when it voted to maintain CASD. At the

same time, we can never be complacent.

As we look towards next year's NATO summit and beyond we must not just ensure the Alliance's political and military leaders continue recognising the importance of nuclear capabilities as NATO adapts and modernise but continues to make the case about the importance of nuclear weapons to a new generation.

Our national safety the strength of our Alliance and the security of the world depends on it.

News story: UK marks 350th UK deterrent patrol

Defence Secretary Sir Michael Fallon has today marked the UK's 350th nuclear deterrence submarine patrol by hosting talks on collective global security with NATO's Secretary General Jens Stoltenberg and the North Atlantic Council.

The UK Defence Secretary welcomed Jens Stoltenberg and all 29 NATO ambassadors to the home of the UK's independent strategic nuclear deterrent, Her Majesty's Naval Base (HMNB) Clyde. Sir Michael also took the opportunity to confirm that the UK will continue to play a leading role in NATO's deterrence missions and will modernise and upgrade the Clyde Naval Base through £1.3 billion investment over the next ten years.

Defence Secretary Sir Michael Fallon said:

From our nuclear submarines that stand ready to defend us against the most extreme threats to our way of life, to nearly a thousand UK troops based in Eastern Europe, our commitment to the NATO Alliance, the cornerstone of European security, is clear and unwavering.

NATO is a nuclear alliance. Only by having a deterrent of our own are we able to help guarantee our nation's security and that of all our NATO allies.

NATO Secretary General Jens Stoltenberg said:

I welcome the UK's strong contribution to NATO, from its commitment to defence investment to its operational deployments. The nuclear forces of the Alliance, including those at Clyde Naval Base, are the supreme guarantee of the security of allied countries and populations.

HMNB Clyde has been home to the submarine based nuclear deterrent for five decades. The UK Government is investing £1.3 billion over the next 10 years to update and upgrade its engineering and training facilities. The Base will be home to the entire UK submarine service by 2020, and supports 6,800 jobs today, which will rise to 8,500 in the 2030s.

The NAC's visit included a tour of a UK Vanguard class deterrent submarine and the Base's extensive Trident Training Facility.

Designing and building the new Dreadnought class of four ballistic missile submarines is one of the largest and most complex programmes that the MOD and UK industry has undertaken. The UK has shown its commitment to the nuclear Non Proliferation Treaty having reduced the number of deployed warheads on each submarine from 48 to 40, the number of operationally available warheads to no more than 120 and remains committed to reducing its stockpile of nuclear warheads to no more than 180 by mid-2020s.

The NAC also toured a Royal Navy frigate taking part in Exercise Joint Warrior, the UK-led multinational exercise that will begin days after the visit, on Sunday 1st October. It is one of the largest military exercises of its kind in Europe, bringing together 35 naval units from Belgium, Canada, Denmark, Estonia, France, Germany, Italy, Latvia, Lithuania, the Netherlands, Spain and the US, as well as aircraft from Canada, France, Norway, the UK and US. As Scotland's largest military establishment, HMNB Clyde is also the operational headquarters for Joint Warrior.

News story: Burial of 19 unknown British WW1 Soldiers in Ypres, Belgium

19 unknown British comrades in arms who lost their lives on the battlefield during World War 1 (WW1) have finally been laid to rest in the New Irish Farm Commonwealth War Graves Commission (CWGC) Cemetery in Ypres, Belgium on Thursday 28 September.

Unusually for a single service the ceremony involved casualties from English, Irish, Scottish and Welsh Regiments. The service itself was organised by the MOD's Joint Casualty and Compassionate Centre (JCCC), part of Defence Business Services and was conducted by The Reverend Iori Price CF, Chaplain to the 1st Battalion, The Royal Anglian Regiment.



Local piper, Pierre Dervaux, leads the procession into the cemetery – Crown Copyright, All Rights Reserved

Sue Raftree, JCCC said:

It is very unusual for there to be 19 First World War soldiers from English, Irish, Scottish and Welsh Regiments buried in one ceremony. It has been a privilege for the Joint Casualty and Compassionate Centre to organise this service.

The soldiers were found following ground work at an industrial development at Briekestraat, Ypres in Belgium. The location, thought to be the original Irish Farm site, is an original war time cemetery created by the army under war conditions. It was believed that all those buried there had been transferred to the New Irish Farm Cemetery, some 300 meters away, but this discovery has proved that they hadn't.



Local children from the Peace Village lay wreaths for the 19 unknown soldiers – Crown Copyright, All Rights Reserved

Investigations undertaken by the JCCC established that of the 19 soldiers:

- 4 served with the Essex Regiment
- one with the Monmouthshire Regiment
- one with the Argyll and Sutherland Highlanders
- one with the Northumberland Regiment
- one with the Royal Irish Regiment

As no regimental artefacts were found, the remaining 11 will be buried as 'Known Unto God'. During the burial service all the coffins were in the burial plots with the exception of 1, which was carried in as the focus of the ceremony by the Essex Regiment, now the Anglians.



A bearer party prepare coffin to be lowered into the ground – Crown
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Reverend Iori Price CF said:

We are always mindful of the costs of conflict and the need we have to pursue peace for all. At such a moment as this, when we have gathered to bury those fallen in conflicts, we reflect on the great price paid by our service personnel then and the motivation that encouraged them.

The headstones were provided by the CWGC and Liz Sweet, CWGC's Director of External Relations in Western Europe said:

We, at the Commonwealth War Graves Commission, are delighted that the sacrifice of these 19 soldiers has been recognised by today's event and will now be cared for in perpetuity by the Commission.

News story: Drones – are you flying yours safely? (and legally?)

Most people will either have flown or seen a Quadcopter type drone being flown about. But how many of you are aware that drones present a hazard to aviation and are subject to the law through the Air Navigation Order?

What is meant by the word 'drone'? The public and press use the phrase for almost anything that flies and does not have a pilot – we in the services generally prefer the terms; Remotely Piloted Air System (RPAS) or Unmanned Air System (UAS), you may even hear Unmanned Air Vehicle (UAV). This article however is not about the RPAS', UAVs or UAS used by the military, these systems (from the large (Reaper) down to the very small), are generally well regulated, procured correctly and flown/operated by trained individuals who understand the hazards involved. This article and the use of the phrase 'drone' focuses on those systems that are affordable, commercially available and weigh no more than 20kg, though the majority weigh considerably less.



A Black Hornet nano helicopter unmanned aerial vehicle (UAV). Crown Copyright. Photo: via MOD.

Most of the commercial drones come in the form of Quadcopters, Hexacopters or even Octocopters, and vary in price and capability. At the bottom end of the market are models that are simply toys, small very lightweight, with limited range and endurance. About £100 will get a Quadcopter with a camera, whilst

not of 'professional' quality these drones can weigh in the region of 1kg and can have a range that takes them beyond the operator's line of sight. For several hundred pounds, you can purchase a drone which has full HD video, a range of beyond 1km and decent battery endurance. These drones weigh in the region of 3kg, perhaps more if purpose built or exceptionally capable. Almost all of these drones, with the exception of the very small toys, have the capability to fly to several thousand feet.

In addition to the standard drones – controlled by a hand held 2 stick controller and operated by eye, increasingly there are those which are operated by what is called 'First Person View'. This is where the operator will fly the drone using a normal controller but will be viewing images transmitted by the drone either through a set of goggles or on a screen.

It ought to be mentioned that legally, model aircraft are also considered drones. These range in size from small light weight models to gas-turbine powered scaled replicas – capable of very fast speeds and weighing close to 10kg.

Drones are readily available on the high street and internet, and are being sold in their thousands, and it is not hard to see why. Not only are they affordable and capable, but they are great fun to fly or operate, and have great utility. Whilst most people use them for personal recreation, they are also very popular with photographers and those that use photography in their business, like estate agents or the media. Those who work at height now use them to get information before climbing or instead of climbing, survey companies use them and large parcel delivery companies have an aspiration to use them for deliveries.

So, drones are here to stay, but what is the problem? In simple terms, for the vast majority of drone users, there isn't one, but there are those who operate their drones too high or too close to airfields. In 2016 there were over 50 reports from pilots of commercial airliners that their aircraft had almost hit a drone. Military aviation is not immune, there have been near misses with Chinooks at Benson and Odiham, likewise for fixed wing aircraft at Cranwell, and in 2016 a Navy Lynx at 2000ft missed a drone by an estimated 30-50 feet. Whilst there is work ongoing within the aviation industry to fully understand the implications of a drone hitting an aircraft, it doesn't take much imagination to understand the likely consequences of 3kg of metal and plastic, including the lithium-polymer battery, hitting a helicopter windshield or, perhaps worse, the tail rotor at 100mph. Likewise for a fixed wing aircraft but at greater speeds, hitting the canopy or disappearing into an engine intake. So if you or members of your family are one of the many owners of a drone, or are thinking of buying one then you need to read on.

If you are using a drone for personnel use then you are governed by the Civilian Aviation Authority (CAA) [Air Navigation Order 2016](#), specifically Article [241](#) (endangering the safety of any person or property), Article [94](#) (small unmanned aircraft) and Article [95](#) (small unmanned surveillance aircraft). This is the law and you can, and individuals have been, prosecuted for breaking it. The new Drone Code is available to download at <http://dronesafe.uk/> along with a useful Drone Assist App created by the CAA

and air traffic control body National Air Traffic Service (NATS) to help individuals understand their responsibilities.



Quadcopter with a camera. Crown Copyright. All rights reserved.

Essentially your responsibilities are:

- to know how to fly your drone safely, and do so within the law
- to understand that the operator is legally responsible for every flight
- to keep your drone in sight at all times – stay below 400ft
- not to fly your drone over a congested area, never fly within 50 metres of a person, vehicle or building not under your control
- ensure any images you obtain using the drone do not break privacy laws
- avoiding collisions – you should never fly a drone near an airport or close to aircraft. It is a criminal offence to endanger the safety of an aircraft in flight

There are several other things to think about – what is your drone going to do if it runs out of power or fails? Is it going to land/fall somewhere safe? Are you far enough away from people, buildings and more importantly airfields if you lose control of your drone? Also bear in mind that you can be several miles away from an airfield and still be a hazard to manned aviation. Height is very difficult to judge from the ground, you might still be able to see your drone, just, and yet be well above 400ft. You should also consider that many military helicopters will often return to an airfield from all directions at 500ft and fixed wing aircraft can start descending from 1000ft about 3 miles away. So the message is this – if you are going to use drones, have a really good think about where you are, keep your drone in sight,

consider what aircraft might be flying about and keep clear – it is your responsibility.

For those who wish to use drones commercially, i.e. for commercial gain, then permission is required from the CAA. They will expect you to attend an accredited course that will train you and assess your ability to safely operate drones. The courses include flying competence, knowledge of the law, risk assessments, decision making and more. They exist to ensure that those who wish to legitimately use drone technology in their business can do so safely and not expose the general public or aviation to unnecessary danger. Further information can be found on the [CAA website](#).

Finally, we all know how useful drones are on operations and some units may consider that these commercially available drones can be put to use to meet service non-core aviation requirements – photography, multimedia applications, surveys etc. If you are considering this, then you need to know that in this instance any drone use for the MOD, will be regulated by the [Military Aviation Authority \(MAA\)](#). Specifically, Regulatory Articles [1600](#), [2320](#) and most pertinently [2321](#). The requirements in these regulatory articles are similar to those required by the CAA. If your unit does not have any aviation expertise you may wish to consult the MAA direct for advice, or, for those with access to the Defence Intranet – view Defence Instructions and Notice (DIN) [2015DIN06-023](#); Alternatively DINs [2016DIN07-112](#) and [2016DIN04-178](#) issued by 700X Naval Air Squadron are a good starting point.

In summary, drone technology is extremely useful, great fun to use and is here to stay. But used wrongly it does pose a genuine hazard to manned aviation, so make sure you know the law, stay within the law and fly safe.

10 things you need to know about flying drones

1. drones can and do present a very real hazard to manned aircraft – pilots (including military pilots) have reported over 50 near misses with drones last year alone
2. drones (including model aircraft) are subject to the law through the Air Navigation Order
3. it is your responsibility to fly safely and within the law – if you don't (and individuals have been) you could be prosecuted.
4. never fly a drone near an airport/airfield or close to aircraft. It is a criminal offence to endanger the safety of aircraft in flight
5. keep your drone in sight and below 400ft
6. do not fly over congested areas and never fly within 50m of a person, vehicle or building not under your control
7. if you wish to use a drone for commercial purposes (get paid) then you need to have permission from the CAA
8. ensure any images obtained do not break privacy laws
9. if your unit wishes to buy a commercially available drone for Defence activities (photographs, multimedia, and surveys at height) it becomes regulated by the MAA and you must follow their rules
10. finally, Follow the [Drone Code](#), have fun and fly safe

News story: False Caliphate faces collapse as UK marks three year tackling Daesh

Daesh fighters are being pinned down by the Royal Air Force in their former stronghold of Raqqa as the UK marks three years of tackling the barbaric cult in Iraq and Syria.

Royal Air Force aircraft destroyed 17 targets in Syria in a single day last week as the air campaign intensifies, forcing Daesh to splinter and retreat from areas it ruled when the UK voted to begin air strikes in September 2014.

British aircraft have struck Daesh 1,340 times in Iraq and 262 times in Syria. In that time the group has lost territory, finances, leaders and fighters as the 73-member coalition has liberated cities in both countries.

Defence Secretary, Sir Michael Fallon, said:

Britain has made a major contribution to the campaign that has crippled Daesh since 2014, forcing this miserable cult from the gates of Baghdad to the brink of defeat in Raqqa. By air, land and sea UK personnel have played a tireless role in striking targets and training allies.

As the second largest contributor to the Global Coalition's military campaign, the UK has flown more than 8,000 sorties with Tornado and Typhoon jets and Reaper drones, providing strikes, surveillance and reconnaissance, refuelling and transport.

Since 2014 the UK has hit Daesh with over 1,500 strikes, bombarding targets including heavy machine-gun positions, truck-bombs, mortar teams, snipers and weapons stores.

RAF Typhoons, Tornados and Reapers have hounded Daesh day and night, striking from Raqqa and Dayr az Zawr in Syria to Qayyarah and Al Qaim in Iraq.

Air Chief Marshal, Sir Stephen Hillier, said:

This has been an immense effort by RAF airmen and airwomen over the last three years of continued operations, countering Da'esh in Iraq and Syria. However, the tempo continues with RAF aircraft destroying 17 targets in Syria in a single day last week.

Three years ago Daesh was barely an hour from the gates of Baghdad, but today it has lost more than 73 per cent of the territory it occupied in Iraq and 65 per cent of its former territory in Syria.

The Royal Air Force has played an essential role to allies, helping Syrian Democratic Forces engaged in ground close combat and the Iraqi Security Forces who continue their advance having liberated Mosul and Ninewah province.

More than 5.5 million people have been freed from Daesh's rule and over 2 million displaced Iraqi civilians have returned to their homes. In Mosul alone, it is estimated that over 265,000 people have returned.

On the ground, around 600 British soldiers are in Iraq, helping to train that country's forces. UK troops have so far helped train over 58,000 Iraqi Security Forces in battle winning infantry, counter-IED, engineering and combat medical skills.

Recognising the valuable contributions made by many serving military personnel, Sir Michael announced an Iraq and Syria Operational Service Medal during his recent visit to Iraq.

The UK's commitment from all three Services to the fight against Daesh across the region now numbers just over 1,400 military personnel, with the latest uplift of 44 Royal Engineers announced in September demonstrating the UK's contribution to the campaign.