

# News story: Defence Secretary confirms UK-US relationship remains unparalleled

Mr Williamson was invited to America to be a guest of honour at a Sunset Parade in the US capital. He also reinforced close ties between the UK and US during a Pentagon meeting with Secretary of Defense Jim Mattis.

This followed a keynote speech at the Atlantic Council think-tank, where he emphasised the vital role of NATO, the need for long-term planning and the depth of UK-US collaboration.

Speaking to the Atlantic Council, Defence Secretary Gavin Williamson said:

For more than a hundred years our Armed Forces have fought in defence of our common values and interests. From the turmoil of the Great War, through the dark days of World War II. From the heat of Korea, to the chill of the Cold War. From the mountains of Afghanistan, to the deserts of Iraq today.

Our two countries have developed the deepest, broadest and most advanced Defence relationship of any two nations. The United States has never had nor will have a more reliable ally than the United Kingdom. Others may pretend, but you will find no greater ally than us.



Defence Secretary Gavin Williamson speaking at the Atlantic Council. Crown copyright.

After giving his speech to the Atlantic Council, during which he also outlined the UK's various deployments across the world, the Defence Secretary headed to the Pentagon to meet Secretary Mattis. Current threats to prosperity and safety, including Russia and the ongoing fight against Daesh, were among the issues that were high on the agenda.

Mr Williamson then attended an impressive Sunset Parade, where US Marines gave a skilled display of music from the United States Marine Drum and Bugle Corps and a spectacular silent precision drill by the Marine Corps Silent Drill Platoon.



Defence Secretary Gavin Williamson with US Secretary of Defense Jim Mattis observe a sunset parade. Crown copyright.

The UK and US are the biggest overseas suppliers to each other's militaries and have worked closely on numerous key projects.

The most prominent of these is the F-35 fighter jet programme and a further five of the aircraft arrived at RAF Marham last week, two months after the first-ever RAF batch flew from the US. Unmanned Air Systems and a Common Missile Compartment for UK-US Ballistic Missile Submarines are other recent examples of collaboration.

Both nations play leading roles in NATO, which is vital to our transatlantic partnership. Both countries have been calling for other nations to invest more in security and to increase the readiness of their forces. By the end of 2018, eight members will be meeting the commitment of spending 2% of their GDP on defence compared with just three in 2014.

An even closer bond is expected after Brexit, as the UK establishes new relationships and trade deals outside of Europe.

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# Speech: Defence Secretary at Atlantic Council

It's an enormous privilege to be here today

I must begin by thanking the Atlantic Council for hosting this event I'm always told Washington in August is always not at its best, so you must be the more hardened inhabitants of this city

The reputation of the Atlantic Council precedes it And the list of your famous alumni is a who's who of the Washington great and good: Dean Acheson, Brent Scowcroft, Colin Powell. A list that goes all the way back to the formation in 1961.

In fact, you couldn't have formed at a more timely moment – one year before the Cuban missile crisis. History doesn't record what role the Atlantic Council played at that time, but I've no doubt the wise counsel of some of your founder members was sought, and judging by the outcome it was clearly good advice.

Today, the insights of your experts are just as important as we seek to navigate the rapidly changing world. As we seek to adapt and harness change and work together to seize the opportunities which change brings, we need that type of dynamic, creative thinking. Because I know many people in this city are nervous about the rapidly changing politics, the rise of new powers and the moving tectonic plates of global politics.

People still worry about Brexit and what role Britain will play in the world. No one should worry. While Britain is leaving the European Union we are clear about our role and our place in the world.

We will remain a nation that champions those fundamental values – of freedom, democracy and tolerance. We will remain a global trading nation and we will remain a global force for good, always committed to strengthening our international security and prosperity

And Brexit is Britain's moment. Britain's moment to look up, be more ambitious redefine our place in the world. In some ways the European Union limited our vision, discouraged us from looking to the horizon. Now we're being freed up to reach further and aim higher, the UK is determined to seize these new opportunities

My job, as Defence Secretary, is to make sure that we can develop, and if necessary deploy hard power which underpins the soft power of our global influence. We start from the strongest of foundations. Britain is a major global actor. We have always been a tier one military power and we always will be a tier one military power, possessing an independent nuclear deterrent, world class special forces and cyber capabilities, exceptional conventional forces able to deploy independently around the globe and take command of coalition forces to deliver joint outcomes.

But we also agree with the United States' National Defense Strategy that: "By working together with allies and partners we amass the greatest possible strength for the long-term advancement of our interests"

After all, we need international solutions to international problems. In the past few years we've seen global terror hit our streets on both sides of the Atlantic. At the same time we've witnessed increased competition between states: a terror-sponsoring Iran, a nuclear-armed North Korea, not forgetting to mention a rising China, and an increasingly aggressive Russia using every weapon at its disposal to advance its interests. A Russia whose use of covert operations and cyber warfare, political subversion and increased military posturing is part of a wider pattern of malign behaviour

Who would have thought a year ago we would have seen in the United Kingdom, in a sleepy town in the middle of the English countryside, the first use of chemical weapons in Europe since the Second World War? With states adopting the tactics of terrorists and terrorists increasingly armed with sophisticated weapons, including cyber capabilities, all blurring the line between peace and conflict

It's clear we're in a new age of intertwined dangers and it is getting ever more complex, so, it's even more important we stand together with our allies.

I'm not here to give you a history lesson, but some of you may be aware in the 1770s we were having some local difficulty in this area. In 1778, the last British governor of New York wrote to George Washington. It was the moment that we were about to vacate the city, and he wrote: "The recent hostilities have been regrettable, but as we withdraw, we do so in the hope that our two nations will build on a common heritage and act together to the betterment of the world."

All those years ago, those words are so very, very true. We have no stronger ally than the United States. And there's a reason so many have called our relationship 'Special'. For more than a hundred years our Armed Forces have fought in defence of our common values and interests. From the turmoil of the Great War, through the dark days of World War II, from the heat of Korea, to the chill of the Cold War, from the mountains of Afghanistan, to the deserts of Iraq today.

We have developed the deepest, broadest and most advanced Defence relationship of any two nations The United States has never had nor will have a more reliable ally than Great Britain. Others may pretend, but you will find no greater ally than us.

And to those who prefer to dismiss what the UK can do, I have one message: We stand with you; ready, willing, and able to meet the challenges of the 21st Century. Our appetite, our desire, our will to be a force for change, a force for good, a force of light that stands as a beacon to the world that burns more brightly today than it has in the last 70 years. That is what Great Britain is.

Let me explain what I mean in more detail. First we are ready to respond to

any situation at a moment's notice. We have forward deployed forces across the globe, we can draw on our overseas territories in Gibraltar, the Sovereign Base Areas in Cyprus, Ascension Island, the Falkland Islands and the British Indian Ocean Territory. These often provide key facilities not just for us, but also for the United States and we are extending our presence with our new naval base in Bahrain.

We also can bring in allies other than the US as and when required, such as our nine-nation Joint Expeditionary Force of like-minded Northern European nations, which can muster up to 10,000 personnel to respond to any type of operation from humanitarian assistance, through to high-end warfighting.

Above all, our readiness comes from having world class personnel. The embodiment of our Global Britain, our Great Britain. More than 14,000 personnel deployed on operations around the globe, with 19,000 preparing to deploy or at readiness to respond. Currently, they are in the North Atlantic commanding and directing anti-submarine operations and keeping an eye on the undersea cables that underpin our online systems

They are on the Eastern fringes of Europe too, supporting NATO's deterrence against a resurgent Russia, policing Black Sea, now Baltic and soon Icelandic skies and leading NATO's presence in Estonia

In March, I visited our troops close to the Estonian border with Russia. I was struck – but not surprised – by how many locals still saw Britain as the liberator and protector willing to stand up for their freedom as we have done in the past.

Our people are not just in Estonia. They are in Poland too, proudly operating side-by-side with a US battle group. It underlines the ever increasing integration of our forces who serve and train together regularly so they can fight together seamlessly. You see this integration between our armies from battle group, through brigade, division to corps. You see it between our air forces and our navies and you see it between your US Marines, who I'll have the privilege of seeing in action at their famous sunset parade later today, and of course, as was mentioned earlier, our Royal Marine Commandos.

In recent months both the US Marines and our Royal Marines exercising alongside each other in the Baltic, in Guam developing new ways of operating in the information age and they will be working together as part of the Marine Expeditionary Force Headquarters on Ex Trident Juncture in Norway later on this year.

Being ready is only one thing, but the United Kingdom has that essential willingness to act, the willingness to use military force when other measures fail, the willingness to operate where others cannot or will not go. Look at the way UK pilots joined their US counterparts to strike Assad's chemical facilities after the appalling chemical attacks in Douma. Or look at our operations targeting ISIL in Iraq and Syria, conducting more than 1,700 strikes against terrorist targets, training more than 77,000 Iraqi Security Forces in Infantry skills, counter-IED, engineering, and medical expertise and providing the second most significant contribution to the military

campaign, after the United States.

But the UK is not just in the Middle East. We're in Afghanistan training a new generation of officers to secure their fledgling democracy and by committing a second battalion to go to Kabul we've demonstrated a commitment to Afghanistan and the Afghan people. We're also in the Indo-Pacific where we led the way by deploying Royal Naval ships to be the first nation to enforce United Nations sanctions against North Korea and where we are maintaining an almost unbroken presence of Royal Navy surface combatants this year and next, increasing our presence around the world.

And when it comes to China we have our eyes wide open. We have a positive relationship with Beijing and wish to build on that. But we will not shrink from telling them when we feel that they do not respect the commonly accepted rules and norms of international behaviour, the laws and systems by which we all, China included, benefit and have a duty to protect.

In this respect, their militarisation of artificial features in the South China Sea is a backward step and puts them on the wrong side of the line of what people expect from great international nations. If you wish to be respected as a global power you have to respect the international norms and behaviours that bind the international community together.

And from the continent of Asia to Africa I've just returned from Mogadishu in Somalia, and also visited Ethiopia and Kenya— where I've seen first-hand the excellent work of UK forces training – stopping the terrorists and helping bring stability. In Mali we are providing our French allies with strategic lift and Chinooks and, let's be clear, we are the only power in Europe with the capacity and the capability to do that. And in South Sudan our people have built a United Nations hospital bringing vital aid in the midst of an awful humanitarian crisis

Whether the danger is near or far, whether we're acting unilaterally, bi-laterally or multi-laterally, the UK continues stepping up. I've already touched on our NATO efforts but since I'm at the Atlantic Council I hope you'll permit to me to say a few more words in support of the Alliance. For it's worth remembering that European nations are not its sole beneficiaries. The only time that Article V has ever been invoked was after 9/11 when Great Britain and other NATO nations stood side-by-side with you after the atrocities that we saw.

Just as the United Kingdom helps the United States shoulder the burden of international security, so does NATO. It is providing a majority of forces for the Alliance's new Iraq mission, European Allies lead NATO's 40,000-strong Response force, they are responsible for 85 per cent of the Kosovo Mission in the Balkans and, at the most recent summit, Allies agreed a Readiness Initiative – within the next 18 months, to have 30 mechanised battalions, 30 combat vessels and 30 air squadrons ready to use in 30 days.

Alongside the US, the UK has also been pressing for the Alliance to do more to pay its way. We are now seeing the results. Last year saw NATO's biggest spending increase in 25 years. Since making the Defence Investment Pledge at



the 2014 Wales Summit, Allies have spent \$87Bn more on defence. In just two years' time that number will increase to at least \$150bn. Four years ago only three allies spent 2 per cent of their GDP on defence, but by the end of this year eight will meet that target. And increasingly we're seeing more partners pull their weight realising they've got to spend more because of the increasing threats the world face.

They're investing in the capabilities essential and relevant to modern warfare, making sure they have the best equipment and the best technology.

So the UK is ready, we are willing, but what makes us reliable partners for the long-term is the fact we are able to act now and in the far future thanks to our world class defence technology and industrial base. Some mistakenly believe that only America can develop cutting edge technologies or capabilities. That has never been, and will never be the case. The UK has always brought something special to the table, from the perilous days of the Second World War when an unassuming British scientist named Henry Tizard flew to the US taking with him a black box containing the secrets of airborne radar and the turbo jet.

And from then right up until today the UK is the biggest offshore supplier to the US military. With the skills to meet a host of your requirements, from avionics and vehicle communication, to military bridging and CBRN. That's why sixty years on from the signing of our Mutual Defence Agreement we continue to co-operate on nuclear technology. There can surely be no greater sign of trust than our willingness to work together on a common missile compartment for our Dreadnought submarines and your US Columbia class submarines.

And that's why the UK is a Tier One partner on F-35, one of the biggest equipment programmes of them all, with the UK producing 15 per cent of every aircraft built, bringing unique British-made capabilities into the development of that stealth fighter.

Next month, with the arrival of our new 65,000-tonne aircraft carrier HMS Queen Elizabeth to the East Coast we take another step towards that momentous day in 2021 when US Marine Corps embark a squadron of F35B alongside our own and for the first time we watch a fifth-generation aircraft fly from the world's first fifth-generation Carrier.

In other words, a vibrant UK defence industry, spurring healthy competition, this is very much in our shared interests. Why reinvent the wheel when you can buy from a trusted partner? It's a two-way street; you invest in us and we invest in you.

Today we're procuring more than 50 types of defence equipment from the US, including: P8 maritime patrol aircraft to Apache attack helicopters to the Reaper drones, all the while UK industry is creating US jobs.

UK Defence companies employ more than 56,000 staff in the United States, with UK businesses employing more than 1,000,000 US employees. We are helping fund programmes collectively supporting the livelihoods of 160,000 Americans. Unsurprisingly, the UK is one of only a handful of trusted partners to be



included within the National Technology and Industrial base initiative, which is looking at sharing ideas, achieving better value for money, and making global supply chains more resilient so we can sustain our military advantage in the future.

We must take maximum advantage of this to create the jobs and prosperity that both the UK and US needs.

But the UK also combines world class capability with strategic long-term ambition. This year our world-famous RAF celebrates its 100th birthday. Far from dwelling on the glory years of the Spitfire fighter and Lancaster bomber, we've unveiled a new Combat Air Strategy to build the next generation of Tempest fighters. No wonder today our great nations together continue pushing the boundaries of innovation; working on insect-like UAVs, on robots that can brave the last mile of the battlefield, on offensive cyber tools to deter, disrupt and constrain malicious activity.

In May it was my privilege to host a meeting between US and UK innovation experts designed to strengthen our co-operation still further. We are now running a UK/US-funded competition seeking innovative technologies ...to destroy chemical and biological munitions, IEDs and bulk agents in challenging environments. And we are investigating new ways to transform the famously convoluted acquisition process, leaping the "valley of death" between research and procurement, rapidly developing novel technologies and state-of-the-art software and developing a cutting edge Chemical Weapons Defence Centre.

So the United Kingdom is ready, willing and able to act when necessary and our Modernising Defence Programme will make sure you can continue to rely on us far into the future. It sets out our vision for dealing with the complex challenges of the 21st century, it will give us a lethal fighting force matching the pace at which our adversaries can now move in every domain from nuclear and conventional to hybrid threats, while strengthening our resilience in an information age to achieve what we're calling 'information advantage'

It will make sure international co-operation is built into our DNA, deepening our relationships across the globe and seeing how we can further rebalance our global posture to be ready and willing to fight in Mainland Europe, in the Middle or in the Far East.

And our programme will transform our defence business, speeding up our processes and bridging the gap between the emergence and adoption of new technologies. The next phase is all about the delivery, but we will continue seeking out the views of our close Pentagon colleagues and the brilliant brains in this room to shape and refine our plans.

So we may be entering a more unpredictable and uncertain age, but I am profoundly optimistic about our future. The UK remains a great power, a country with one the world's biggest economies, a creative powerhouse, a force for good and we continue having one of the most credible Armed Forces anywhere on the planet. A force that will continue using its power – hard and soft – in concert with our greatest ally, the United States. We will always

be the most natural of partners together.

Thirty years ago Ronald Reagan gave a great speech to the Annual Meeting of the Atlantic Council. He spoke of his hopes of a rapprochement between East and West. He spoke of being for freedom and democracy “without hesitation or apology”.

And he quotes the words of that great Anglo-American Winston Churchill: “Where we are able to stand together and work together for righteous causes, we shall always be thankful, and the world will always be free.”

So, let us seize this moment to strengthen our transatlantic ties. In the face of an ever greater unpredictability, let us show our certainty in being ready, willing, and able to act as that great bastion of international peace and prosperity. And let us do everything in our power to make sure those great Anglo-American values prevail, for our values of liberty, justice and democracy that underpin the Magna Carta and your constitution. They represent more than just the soul of our nations, they are the cornerstone of the Western world

But please never underestimate my nation, as we have changed the World time and time and time again and we will change the world in the future. For we are a nation when we realise it is in our interest or when it is right we as a nation always act.

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## [Press release: 3000 people gather to mark the centenary of the Battle of Amiens](#)

- The UK Government hosted the event, in collaboration with the governments of Australia, Canada, France and the US
- In a speech at Amiens Cathedral, The Duke of Cambridge pays tribute to those who served in the battle one hundred years ago

More than 3,000 people gathered in France today to mark the centenary of the Battle of Amiens and the start of the Hundred Days Offensive, the final period of the First World War.

His Royal Highness The Duke of Cambridge joined Prime Minister Theresa May at the ceremony in Amiens Cathedral to remember those who fought in the battle.

Two thousand guests watched the service from inside the Cathedral, including hundreds of descendants of those who fought. A further 1,200 members of the public watched from the Cathedral square.

In a speech, HRH The Duke of Cambridge paid tribute to those who served in the battle one hundred years ago and the cooperation between the Allied nations.

Prime Minister Theresa May said:

The Battle of Amiens was the turning point which hastened the final, decisive chapter of the First World War.

A hundred years on, today's ceremony is a fitting moment to remember those who sacrificed their lives, and reflect on our shared past, present and future.

Culture Secretary Jeremy Wright said:

The Battle of Amiens marked the beginning of the end of the First World War. It was a crucial step in securing the Allies' victory in November 2018.

Today, we have come together as friends to remember those who fought and to reflect on the sacrifices they made.

On 8 August 1918, the Allied armies, made up of British, Australian, Canadian, French and American forces, advanced over seven miles on the first day of the Battle of Amiens, one of the greatest advances of the war.

The battle demonstrated how the Allies had learned lessons from previous campaigns and combined the use of infantry, artillery, tanks and aircraft to devastating effect.

Amiens also marked the start of the Hundred Days Offensive that won the war sooner than had previously been thought possible. The opening day of the battle was described by the German General Erich Ludendorff as the black day of the German Army.

After today's ceremony, in a moment that reaffirmed the bonds of friendship and peace between nations, His Royal Highness, the Prime Minister, along with representatives from France, Germany, Australia, Canada, the US and Ireland laid flowers in the Chapel of the Allies in the Cathedral. Flags that were presented to the Bishop of Amiens by the Allied nations after the Battle have remained in the chapel ever since.

His Royal Highness and the Prime Minister also met a number of descendants of those who fought at Amiens.

## **Notes to Editors:**

For further information please contact Faye Jackson in the DCMS Press Office on [faye.jackson@culture.gov.uk](mailto:faye.jackson@culture.gov.uk) or + 44 (0)7788 345 722

Read and download the [Amiens Official Commemorative Programme](#)

Details of the representatives who attended from the other nations who laid posies:

- Madame Florence Parly, Minister for the Armed Forces
- His Excellency, Mr Joachim Gauck, former President of the Federal Republic of Germany
- The Honourable Seamus O'Regan, Minister of Veterans Affairs and Associate Minister of National Defence, Canada
- The Honourable Darren Chester MP, Minister for Veterans' Affairs, Defence Personnel and Minister Assisting the Prime Minister for the Centenary of Anzac, Australia
- Her Excellency Ms Patricia O'Brien, Ambassador of Ireland to France
- Kristina Kvien, Acting Deputy Chief of Mission at the U.S. Embassy in Paris

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## Speech: 65th Anniversary of Korean War Armistice Agreement

Thank you, Mr Sun [or "Nahmkook", Korean Chargé d'Affaires], for those heartfelt words.

Today, in glorious sunshine, we gather to mark the anniversary of the cessation of hostilities on the Korean peninsular 65 years ago.

That conflict has sometimes been called the "forgotten war".

But in the UK we have never forgotten the 1 million killed, injured, missing or abducted in that dreadful conflict; brave people from 21 countries around the world.

We have never forgotten the 100,000 personnel we sent to assist in your noble struggle – the first UN action against aggression. Nor the more than 1000 of our people who never made it back

And we have never forgotten extraordinary events like the Battle of the Imjin River, and the heroic resistance of the British Army's 29th Infantry Brigade ... outnumbered 18 to 1 on the famous Hill 235. Two received Victoria Crosses but all were heroes – waging war not merely against superior forces but in mountainous terrain in the midst of extreme weather.

It has been one of the great privileges of my time in Defence to sit with some of those veterans...in the Republic itself ...in the shades of Gapyeong ...before the moving monument at Imjin, with the names of heroes carved into the cliff face.

And today it is an honour to welcome our Korean counterparts here to London. But as we stand beside this nameless bronze soldier on his plinth of Portland stone and we remember the numberless who served we ask ourselves a question. What could have prompted such extraordinary feats of shared courage?

To me the answer is simple. Our nations are kindred spirits. We share a profound desire to be free. And we share a determination to fight for the freedom we sought.

In the decades since that conflict, the world might have changed almost beyond recognition. But the bonds forged in the hardest of times have only strengthened since then. And in the face of new threats, our nations are working together more closely than ever.

Whether it's sending our largest ever deployment as United Nations Command Sending State to South Korea to participate in exercises in 2017. Whether it's deploying our first RAF pilots to the Republic since the Korean War the year before. Whether it's working on submarine systems and air tankers.

Or whether it's working together to protect human rights, counter proliferation, and combat climate change. Sixty-five years on and our people continue fighting for the global good.

So as we stand here in the sunshine, let's remember the service and sacrifice of times past. But let us also recommit ourselves to taking our partnership to even greater heights...securing a brighter tomorrow...and a legacy our brave forebears can be proud of.

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## **Speech: First Space Conference**

### **Introduction**

Thank you for that kind introduction, Mark [Roberts].

I am delighted to welcome you to the First Defence Space Conference, jointly organised by the Air Power Association and the Ministry of Defence.

I'd like to start with an invitation:

Look west at about ten to nine tonight.

If it's clear ... and if you've got very good eyes ... you might just make out a small point of light, making its way steadily across the evening sky.

500 miles up, heading south over the mid-Atlantic, is the satellite Prospero.

Built by British craftsmen at the Royal Aircraft Establishment in Farnborough

...

... launched by a British Black Arrow rocket back in 1971 ...

... its systems de-activated and its radio signals not heard for nearly 15 years ...

... but still up there, gamely orbiting the earth every hour and a half at 17,000 miles an hour.

A museum piece? A time capsule? Just an anonymous piece of space debris from the age of Apollo?

No. I see Prospero as an inspiration – not just reminding us of this country's space heritage, but pointing the way to a bright future.

## **Conference Overview**

We have a proud tradition of expertise and innovation in space technology.

Our space community may be small in number, but it is perfectly-formed and exceptionally well-connected.

I am very pleased to see so many of you here today.

Today's Conference will highlight why and how we are strengthening our approach to space capabilities and operations.

And we'll be stressing the centrality of our partnerships with the UK Space Agency, with our international allies, and with the industry.

Because as space technology takes an ever more central place in all our lives and activities, it becomes increasingly important to Defence and Security.

At the same time, we face new hazards ... new threats to civil and military satellites, and other vital space services.

I'd like to look at those areas in turn.

## **Military Importance of Space**

The first thing to bear in mind is that space isn't just about what happens above the stratosphere.

It's about what happens down here.

We rely on space capabilities and services for very many of our Defence functions.

They provide critical intelligence, surveillance and reconnaissance, precision navigation, and timing.

Without them, our Armed Forces' co-ordination and communication would be much

more difficult.

In some circumstances, it might be impossible.

So over the last year we've expanded our thinking at MOD.

Advanced space capability is essential to support all Defence environments.

That's why we designated it as a Critical National Infrastructure in 2015.

And why space has joined air, land, sea and cyber to form the five domains which now inform all UK Joint Force policy.

## **Commercial Importance**

Of course, space is also a vital part of the economy – an industry worth £14 billion a year.

We build a quarter of the world's large communications satellites.

Our expertise in smaller satellites is unrivalled, with the likes of Surrey Satellites, Clyde Space, and Oxford Space Systems building about 40% of the global total.

We're also leading the world in wider space technology.

Reaction Engines, for example, are unlocking the future of hypersonic flight with the revolutionary Sabre propulsion system.

And the UK's Daedalus experiment – which we're helping to fund via the Chief Scientific Advisor's investment into the Defence Science and Technology Laboratory – is pushing the boundaries of what's possible in space sustainability.

Daedalus is exploring "de-orbit sails", giving satellites a controlled descent into the Earth's atmosphere at the end of their operational lives.

The pace of change in affordable space technologies is quickening ... and we have to harness that for Defence.

## **Threats**

So we've got a thriving space sector, at the cutting edge of a technology which is becoming more central to progress and prosperity with every passing day.

But that technology is potentially very vulnerable.

The UK remains fully committed to the 1967 Outer Space Treaty, which declares space to be the province of all mankind – free for exploration and use by all nations.

While that's a noble sentiment, we have to recognise that the world has moved



on.

Back then, beaming a flickering TV picture across the Atlantic was a rare event – a marvel.

Now space-based technology is everywhere, underpinning many aspects of our daily life.

If it were seriously compromised, it wouldn't just affect the military.

We all rely on satellites for communications, navigation, and meteorology.

That means everything from your daily weather forecast or the SatNav in your car ... to the emergency services' ability to respond when we most need them.

We'd all experience delays, shortages and bottlenecks ... enormous social and economic damage could be possible.

What's more, our ability to monitor and react to threats would suffer ... severely affecting our ability to react to humanitarian crises, weather events, terrorist attacks, breaches of arms control agreements or expanding drug cultivation.

At the same time, the threat environment is very different.

The era of the Treaty was the era of Gemini, Vostok and the bipolar Cold War.

Things are more complicated now.

The international environment is more fluid ... rogue states are more ready to challenge the rules-based international order ... and non-state actors are increasingly gaining access to the sort of high tech equipment which was once the monopoly of NATO and the Warsaw Pact.

Space is becoming much more accessible, with cheaper satellites put into orbit by commercial suppliers using greatly improved launch technology.

But at the same time, space is a more threatening environment.

Back in 2007, China tested a satellite killer.

Not only did that show the physical vulnerability of our space hardware to attack ...

... it sent thousands of pieces of debris spinning through the orbital environment, endangering billions of pounds of equipment from many countries, including the International Space Station.

The danger also comes from cyber hackers ... and those who seek to disrupt the satellite signals we depend on with cheap devices bought on the internet.

We are responding in a comprehensive and deliberate manner.

As I mentioned, we are now treating space as a key operational domain.

We're working to fully understand the risks – from accidents and natural hazards in space, to a deliberate attack by organised groups or another state.

We must be able and willing protect and defend our space assets and infrastructure alongside our allies and partners.

And we're actively looking at our own space capability and the scope for new international partnerships, as we approach Brexit in March 2019.

## **Our Approach**

To stay ahead in the space race, we're taking a three-fold approach.

## **Partnership**

First it's about partnership – internationally, at home and across Government, and with the private sector.

All our key allies are seeking to develop their space thinking and investment, and many are increasing their investment in defence and civil space programmes.

We are actively working through NATO to raise the profile of space technology in Defence and Security, and ensuring we're at the forefront of international space Science & Technology activities.

At home, our close co-operation with the UK Space Agency and the industry is vital.

Graham Turnock will be speaking to you later.

While I won't steal his thunder, I will mention their excellent work towards a Civil Space Strategy, ensuring that the UK remains at the forefront of the latest space developments worldwide.

When it comes to partnership, I should add that we're keen to remain a part of the Galileo project in which we were instrumental from the start.

The threats that Galileo is designed to counter are shared by all of Europe.

So it makes no sense for the Commission to exclude us from this programme – especially when many of its key modules and software were developed and built by UK experts.

By denying us the level of participation in Galileo we need to meet our mutual security requirements – which is well beyond simply having permission to use the secure signal – the Commission risk setting the programme back a number of years.

It would no doubt also increase its cost.

We don't want that to happen.

We want to work closely with our European partners on security, so we're still in discussion about the programme's future.

But we're also making sure we're not limiting our own opportunities.

That includes looking at the possibility of an independent encrypted satellite navigation service, and the MOD is strongly supporting the Task Force led by the UK Space Agency, to look at the alternatives.

## **Investment**

The second pillar of our approach is investment in technology and skills.

As Greg Clark announced last November, the Government is putting £50 million into the development of spaceports under the UKSA's LaunchUK programme ...

... accessing a global market for launching small satellites worth £10 billion over the next decade.

£99 million has been awarded to RAL Space from the Government's Industrial Strategy Challenge Fund to develop the National Satellite Test Facility.

By 2020, that will provide a world class set of facilities for the assembly, integration and testing of space payloads including a large satellite test chamber.

This will enable UK companies to develop "next generation" launch and testing technologies for constructing satellites and delivering payloads into orbit ...

... as well as giving them the tools to bid competitively for international contracts, ensuring the UK remains a world-leader in the space technologies market for decades to come.

£10 million has gone into PRIMUS to develop a small satellite constellation.

And the Government has put £4.5 million into the launch and operation of Surrey Satellites's Carbonite-2, which has given our military access to sovereign full-motion colour video from space for the first time.

This is serious investment.

## **MOD Space Strategy**

We know this is a huge market – and it's getting bigger by the day as new applications of technology find new commercial uses.

In addition, the United States and other nations are now actively looking for commercial space partners.

And that brings me to the third part of our approach – seizing opportunity.

With its heritage and expertise, the UK's industry is well placed to grow rapidly.

Our aim is to grow the UK's share of the global space market from 6.5% to 10% ... generating £40 billion a year for by 2030.

So we're determined to fire up the thrusters for military space capability by publishing our first ever Defence Space Strategy in the summer.

The 2016 Queen's Speech committed the Government to making space a priority.

As I've shown you, we're now delivering on that commitment through investment and partnership, uniting experts from across government and the private sector.

The Strategy will bring that work together as a vision for the future, and other speakers today and tomorrow will say more about the key elements of it.

And we're opening up the enticing prospect of Britain regaining the ability to launch satellites into orbit – something I know is close to many of your hearts.

## **Conclusion**

On that note, I'd like to leave you with a final thought.

Earlier I mentioned Prospero – the last satellite launched by the UK ...

... a successful venture whose results can still be seen in the night sky, nearly half a century later.

That was what we could do back then.

Today we not only have enormous technical nous – we have strong bonds with partner nations across the world.

What could we do tomorrow?

In a few decades' time, I don't doubt they'll be many more sparkling points of light in the night sky ...

... to which we can proudly point and say "Made in Britain".

Thank you.