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.

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.

Speech: Soldiering on Awards

It seems hard to believe that a year has gone by since the last Soldiering On Awards.

And what a year for our Armed Forces! All three Services have been flying the flag for Britain – from the RAF in Syria and over the Black Sea, to our Navy keeping the ocean sea lanes free, and our Army leading NATO's deployment in the Baltic.

What's more, we're celebrating 100 years since the end of the First World War and the birth of the RAF – the first and most famous independent air force in the world.

What better way to celebrate such a year than with the Soldiering On Awards?

It gives me great pleasure to welcome you to this evening, when we recognise and honour the talent, inspiration and enterprise of our Armed Forces community – whether serving, Reservists, or former members … along with all those who support them.

Tonight we don't just celebrate bravery, determination and teamwork. We celebrate compassion and care. And the "can do" attitude which brings all those qualities together in the ethos of all those who serve.

These Awards shine a light on how that ethos contributes to society as a whole. Because our bond – our mutual dependence – extends well beyond times of danger … times when we look to our Armed Forces for security and protection.

As a community and as a nation, we are truly stronger together.

This year the involvement of X-Forces extends the reach of the Awards even further. Now they fully encompass the business community – from start-up entrepreneurs to established businesses.

It's a great pleasure to welcome so many of you tonight, including X-Forces' Patron, Lord Young.

The Soldiering On Finalists here tonight come from right across our Armed Forces community. I'm humbled and privileged to be amongst such an outstanding group.

In reaching this stage, each and every one of you is a winner – and this evening is for all of you.

Distinguished guests, please join me in a round of applause for the 2018 Finalists …

But that's enough from me. Let's hear from some previous Finalists and Winners.

Press release: Animal welfare enhanced by new code for laying hens and pullets

The welfare code for laying hens has today been updated as part of a programme of reforms to safeguard and enhance the welfare of animals.

Strengthened statutory guidance is now in place for keepers and owners of laying hens and pullets on how to meet the needs of their birds and enhance their welfare.

This welfare code has been updated to reflect the very latest advice from vets and animal husbandry developments, as part of a programme of reforms to safeguard and enhance the welfare of animals, the Minister for Animal Welfare, Lord Gardiner announced today.

Minister for Animal Welfare, Lord Gardiner, said:

> We have some of the highest animal welfare standards in the world and are going further in a number of areas, including our plans to raise maximum sentences for animal cruelty to five years and making CCTV mandatory in abattoirs.
>
> This code was carefully consulted on with industry experts, and uses the most recent scientific and veterinary advice to ensure this clear guidance provides the best advice to owners and keepers to help ensure the high welfare standards of their animals.

Animal keepers are now expected to provide a more enriched environment for all laying hens to enable them to display more of their natural behaviours such as foraging, helping to ensure more fulfilled and healthier animals. The user-friendly codes also provide detailed guidance to animal keepers on how to assess the welfare of their animals, as well as on contingency planning to help ensure the welfare of their animals during any emergencies.

The codes will be used by enforcement bodies including Animal and Plant Health Agency inspectors and local authorities when investigating allegations of poor welfare to look at whether animal welfare standards are being met.

The full code is available to read online.

Notice: Ian Mercer and Andrew Mercer: application made to abstract water

The Environment Agency consults the public on certain applications for the abstraction and impoundment of water.

These notices explain:

- what the application is about
- which Environment Agency offices you can visit to see the application documents on the public register
- when you need to comment by