<u>Defence Secretary keynote speech at</u> the Air and Space Power Conference 2020

Good morning. I'm delighted you've invited me, as a former soldier, to speak to you. As someone who had a relative in the Royal Flying Corps in the First World War it's amazing to see the development of the RAF from its birth over a hundred years ago.

This year we will be remembering the magnificent few... the 80th anniversary of the Battle of Britain coming up in a few months' time.

But today we want to focus on the future. We've recently seen the whole of Defence and the RAF, as part of that, responding and adapting.

During Corona you were instrumental in setting up helicopter hubs, delivering PPE, establishing airbridges and supplying medical reservists on the wards.

But you also showed essential resilience in maintaining our operations in the UK all over the world.

During Covid-19 our adversaries didn't have a ceasefire.

So you were out there stopping the threats that most people don't see…protecting the UK and Baltic airspace…supporting operations in Afghanistan…striking terrorists in the Middle East.

Thank you and thanks to your resilient families too…especially those who have found themselves overseas at this tough time.

The people of our Armed Forces have always been our greatest asset.

But we must think about what comes next. The global picture has changed. Threats are coming from all different angles.

Nor are they necessarily hard power dangers. Today we're facing Coronavirus...tomorrow it could be a high-level cyber strike. It's clear the binary distinctions between war and peace have disappeared. Our adversaries now wear many masks. They know we're dependent on IT. They know that Information Advantage is key. They know globalisation makes us more vulnerable. So there's a danger our competitors will use proxies and new technologies to outflank us

For too many years we simply sat back admiring the problem of hostile states and other actors outmanoeuvring us below the threshold of conventional conflict, instead of making the tough choices necessary to unmask and counter our opponents in the interests of promoting our national peace, purpose, and prosperity.

But we cannot pick and choose isolated battles any longer. We cannot be focused on fighting the last war. Instead, Global Britain must step in in an increasingly unstable world of constant competition

That means asking ourselves what the air and space environment of 2030, 2040 or even 2050 will look like. How will we operate? How will we fight? What are the attitudes? What are the ranges? What are the altitudes? What are sunset and sunrise capabilities that we need in the battle-space of tomorrow? What will be the role of our aircraft?

More particularly what will the role of our air and space forces be in the world of constant competition?

We need to think carefully about the threats and opportunities we face in the new domains of warfare, such as cyber, a theme that runs right through this conference.

We need to look at the lessons of others. Look how Turkey has been operating in Libya where it has used Bayraktar TB-2 UAVs since mid-2019

Those UAVs have conducted intelligence, surveillance and reconnaissance and targeting operations against frontlines, supply lines and logistics bases.

In July last year they struck the Libyan National Army controlled Jufrah airfield destroying several command and control nodes as well as two transport aircraft.

Or consider Turkey's involvement in Syria and its use of Electronic Warfare (EW), lightly-armed drones and smart ammunition to stop tanks, armoured cars and air defence systems in their tracks

According to reports, Assad regime suffered heavy losses "3000 soldiers, 151 tanks, eight helicopters, three drones, three fighter jets vehicles and trucks, eight aerial defense systems…and one headquarters, among other military equipment and facilities."

Even if only half of these claims are true the implications are game changing.

Similarly, consider Russian activity in the Ukraine where according to open source they've used electronic warfare to jam enemy communications locate and target troops with artillery, turn Ukrainian tech against their own operators, and sent out false GPS and even used psychological warfare by sending texts to individual Ukrainian soldiers

Even in the midst of Covid, our adversaries have continued using social media tools to spread malicious misinformation and muddy the narrative.

If we're to attain information advantage we must work out how we can be as nimble as our rivals.

Acting at pace in an era when disruptive capability is advancing exponentially through the aggressive application of machine learning,

artificial intelligence and quantum computing.

That's why we've just signed a £65m contract for the production of our first ground-breaking Protector aircraft.

It's a major gear shift, replacing Reaper with Protector, a remotely piloted aircraft with an incredible endurance which will give us global reach. It is due to be in service by 2024

As we look towards tomorrow we must also understand the new parameters we're operating in.

What is the philosophy of this new battle-space?

The doctrine of these new domains is embryonic and evolving rapidly. So what are the new rules?

What sort of kit will we need? What sort of people do we require? What should our aspirations be?

Our opponents are constantly seeking to go higher, faster and further

We know they've got thermobaric weapons.

We know they are developing hypersonic glide vehicles.

We know UAVs and deep strike pose us a lethal threat, however, dispersed your forces are.

We know increasing numbers of actors have the ability to hit us with precision and at range.

And we know, all the while, that Russia and China are developing offensive weapons in space, a major cause for concern given that satellites don't just provide our global communications, critical intelligence, and surveillance and navigation

But underpin our critical national infrastructure, from mobile phones to cashpoint to the stock market

That's why, in the future, what's above you will be often more important than what's in front of you.

So hiding and finding will be at the centre of tomorrow's battlefield.

If you can be found, you can be killed.

But if we're to prepare ourselves properly for the fight I need you to understand the High Command's intention and your role in it, and your role as a consequence.

I'm not just looking to you to keep up the excellent delivery in operations, I also want you to provide me with excellent military advice.

Don't try to second guess intentions from Head Office.

Instead give me a true perspective.

Tell me what the options are and outline the alternatives.

You're asking government to commit to your vision.

So paint a picture for me of the future battlespace.

That's the only way I can make the right decisions about our Future Combat Air Systems.

What's already clear to me is that we're no longer in the business of relying on one fighter, or on one type of aircraft that can do one thing.

You will need to defend, police, control and command the battlespace.

That requires multi-role capabilities.

But it also requires greater integration between the services. One question I know you're already asking is how can you integrate your new Poseidon with the submarine service to disrupt Russian underwater activities? But where and how else can we speed up integration?

To return to my theme of hiding and finding.

If you can't find your opponent whether in the physical world or in cyber space, it's no good.

If you can't hide up in the air, it's no good.

But if you can do both you'll win.

Developing my understanding of your vision for air and space will be vital as we head towards the Integrated Review.

While not wishing to prejudice the IR, I see this as a unique moment to repurpose UK Armed Forces and the RAF for an era of constant competition.

An opportunity to ensure your future structures and capabilities are relevant and sustainable in a security environment that demands proactive, campaigning mindsets.

That demands we deter threats and size opportunities every single day instead of holding capabilities in readiness for a 'rainy day'.

We need to do things differently, moving on from a joint force to an integrated force, with every asset and capability we have, seamlessly, in real time, with our partners and allies, to hold our adversaries to risk.

I have a vision of UK Defence, where we're able to join the dots between space, air, surface and sub-surface, so that the sum of the parts means much more than the value of the individual parts, and where we can do this in real

time at the time and place of our choosing.

That requires a rebalancing from Industrial Age to Information Age capabilities — investing in cyber, space, electronic warfare, AI, robotics and autonomy — coupled with their integration with the best of what already exists

It goes without saying that you have an important role to play in all of this.

Which brings me back to the point I started with — our people.

Mastering the airspace and new domains of the future will ultimately depend on your skills and your ingenuity.

But the RAF gets it. You put people first. I see that not only in the way you utilise the talents of your Whole Force — blending the skills of Reservist and Regulars. Not only in the way you encourage flexible working to meet the needs of families. But in the way you embed your values into everything you do. Values of clarity, persistence and resilience under pressure.

Values of innovation, imagination and ingenuity.

Values that have elevated our air men and air women since the days of the Royal Flying Corps and the Royal Naval Air Service.

Blending of Regulars and Reservists flexibly.

So have confidence in your values.

Keep asking the right questions.

Keep giving me that sage advice.

Keep maintaining the daredevil spirit, and I guarantee you will inspire Defence and the country as a whole to go higher, faster and further than we've ever gone before.

Thank you very much.