

Speech: Launch of the Combat Air Strategy at the Farnborough Air Show

Introduction – History

May I start by stating what a huge pleasure it is to be here. This is a year of many milestones for aviation: 110 years since the first powered flight here in Farnborough; 100 years since the first mission of the newly-formed Royal Air Force; 75 years since the legendary Dambusters dropped their bouncing bombs on Nazi oppressors; and 70 years since the fanfare of the very first Farnborough Air Show. Today we celebrate those past achievements.

Present

But we also have to marvel at the high-tech achievements of the present. The UK remains a world-leader in combat air, combining skills and technology from right across Europe. It directly supports over 18,000 highly skilled jobs, with a further 100,000 in the supply chain.

It has a turnover in excess of £6 billion a year. And it accounted for over 85% of UK defence exports in the last year alone, and over 80% in the past 10 years.

Alongside our partners we're also delivering Typhoon, with more than 20,000 flying hours on operations. As well as the F35 Lightning II as the United States' only Tier 1 partner, delivering 15% by value of every F-35 built.

The Future – Tempest

But let's be clear, we're entering a dangerous new era of warfare. So our main focus has to be the future, and how we deal with the developing dangers. Today we offer you a glimpse of tomorrow, starting with the unveiling of the concept model beside me.

Tempest is a potential future fighter with advanced flexible power and propulsion systems, a virtual cockpit, swarming weapons and laser directed energy weapons. Operated either manned or unmanned, it will be rapidly upgradeable and cyber resilient. A concept, yes, but built on three credible principles – the pillars of our future approach.

Vision

First, we have a vision for developing next generation systems and weapons. That's why today we're publishing our first ever Combat Air Strategy, alongside a plan to make lofty aspirations a reality.

This is a Strategy to keep control of the air both at home and abroad, to remain a global leader in the sector and support the UK's wider prosperity

agenda, and to protect and build on key skills across the UK's industrial base.

Commitment

Next, we have an iron-clad commitment to deliver. In the 2015 Strategic Defence and Security Review we promised to invest in new complex weapons. And we've done what we said we'd do, working with our industry partners, investing £2 billion until 2025 to make our Future Combat Air System Technology actively take off. To make it real. To make it happen.

Make no mistake, we'll be showing the same energy, speed and commitment to bring our Combat Air Strategy to life. A new team is already on the runway, and their timetable clear. I want to see a business case for the acquisition programme by the end of the year.

Early decisions around acquiring next generation capability will be made by the end of 2020 ... final investment decisions by 2025 ... and by 2035 I want to see Tempests flying alongside our world-beating Typhoons and F-35s.

Collaboration

Finally, our approach hinges on international collaboration. Tempest is envisaged as an innovative partnership between the Ministry of Defence and the industry partners of BAE Systems, Rolls-Royce, Leonardo and MBDA.

But we want new partners as well. Together we want to design and build ultra-advanced equipment, far faster and keeping ahead of the breath-taking pace of technological change.

And we want to put our world class skills at the disposal of our friends, while embracing the high-end skills that they also offer and can bring to the table, building on the best of what every nation can bring.

My questions to potential partners in the room today are simple: How can you work with us? How can we work with you? Let us discuss our requirements – what we want to see from the future and we can get started.

Conclusion

So Farnborough is once more writing a new chapter in the history of our aviation nation. As we enter the next century of airpower, we're not just unveiling a concept. We're setting out a plan. Rolling up our sleeves to make sure our Royal Air Force, our Combat Air sector and our global Britain fly higher, faster and further than ever before.

Speech: British Medical Association Armed Forces Conference

Introduction

I am delighted to be here today – I'd challenge anyone to show me a more distinguished, talented and committed group of specialists than those gathered in this room.

The BMA has done a great job in bringing you together.

Because we're at an exciting time in Defence medicine. We're asking a lot more of our Armed Forces at the moment, as they defend our security and prosperity in an increasingly-threatening world.

That means we're asking a lot more of you as Defence medics.

To say you've risen to that challenge in the past is an understatement – British military medicine has been the envy of the world for over a century.

On the battlefield, we can now deal with injuries that would have been beyond hope only a few short decades ago. To my mind, that's up there with the greatest scientific achievements of the age.

That achievement was not just a matter of startling technological innovation – it took courage and commitment.

It's not for nothing that military medical staff have been awarded 27 Victoria Crosses – and two of only three VC Bars ever awarded.

The Government is deeply grateful for what you do – and we don't underestimate the difficulties of your jobs.

Let's begin by recognising those challenges.

Facing the Challenge: Defence & Health in Partnership

You make an essential contribution to our Armed Forces.

But you're also important parts of the NHS which serves us all.

So I know that you're facing the same problems in both your military and NHS work.

To an extent, our society is victim of its own success in treating serious disease.

People are living longer. Their expectations as patients are far higher. And

as technology changes at a bewildering rate, the cost of drugs and equipment soar.

That can mean stretched budgets and hard choices.

Of course, the military community is not immune from the wider challenges we face – not least, in mental health.

Our aging population includes an estimated 2.5 million veterans – 63% of them 65 or over, according to the latest estimate. Many of them served in the Second World War or on National Service.

We have an obligation of high quality care to all of them, which is embodied in the Armed Forces' Covenant.

I have been a Minister in both Defence, and in what is now Health and Social Care.

I know from experience that both areas are enormously complex – with different priorities, and even different languages.

How are we to respond? How can we work in a properly joined-up fashion?

Since this year we celebrate the 100th anniversary of the birth of the RAF, let us turn for guidance to Sir Archibald McIndoe, the pioneer of plastic surgery for hundreds of terribly-burned aircrew who joined the "Guinea Pig Club" during World War II?

He said that "skill is fine and genius is splendid – but the right contacts are more valuable than either."

He knew what he was talking about.

Contacts are good in any professional environment, of course.

He should know! Sir Archibald got his first job through his cousin, the equally distinguished reconstructive surgeon, Sir Harold Gillies of the Royal Army Medical Corps.

But that's not what he meant.

For me, he was talking about working in partnership across professional boundaries.

Knowing who to turn to for specialised help ... who to go to ensure that care continues once a patient is discharged.

That's what you're already doing so successfully, every day of your working lives.

And it's the approach we're now taking in supporting your vital work.

I'd like to focus today on three specific areas of that work.

Tackling Mental Health Problems

First, our work on mental health.

It is important to recognise that the vast majority of the 15,000 people who leave the Forces every year make a successful transition to civilian life.

The rate of Post-Traumatic Stress Disorder [PTSD] our people suffer is about 4%.

That's broadly comparable with the general population.

So is the proportion who suffer a mental disorder needing specialised psychiatric services.

But PTSD rates rise to 7% for combat troops, who also suffer higher rates of common mental disorders such as anxiety and depression.

That's an issue we have to address.

We have a clear duty to those who've come to harm in the service of our Armed Forces.

It makes no difference whether that harm is physical or mental, they have "parity of esteem" as far as we're concerned.

So we announced an additional £20 million earlier this year to improve mental health services in the Armed Forces bringing our spending up to £220 million over the next decade.

And we launched our Defence People Mental Health and Wellbeing Strategy last year.

Based on the model Promote, Prevent, Detect and Treat, that Strategy works on several levels.

For serving personnel, mental health briefings prior to deployment are now mandatory.

Specialist nurses work in-theatre, and Trauma Risk Management processes are now in place across all three Services, offering peer-peer support for those who have experienced traumatic events.

Treatment is delivered by 11 military Departments of Community Mental Health, plus a network of satellite Mental Health Teams and visiting clinics.

In-patient care is provided in dedicated psychiatric units through MOD's contract with 8 NHS Trusts.

For veterans, we've worked closely with the NHS over recent years.

NHS England launched their specialised Veterans' Mental Health Complex Treatment Services on 1 April, following last year's launch of the Veterans'

Transition, Intervention and Liaison Service.

This links to the Veterans' Gateway and other support services, including Combat Stress – which you'll have seen has just launched a new 24-hour helpline on our behalf.

The aim is to provide services which are fully accessible to those who need them most.

The Armed Forces' Covenant and Veterans' Board is overseeing our work – and is meeting tomorrow [26 April] to consider health and wellbeing priorities across the Armed Forces community.

Flexible Working

That's one side of our new holistic approach – bringing together all relevant agencies in planning and delivering high quality care.

The other side is looking at "the whole man or woman".

Of all audiences, I don't need to tell you that health and wellbeing are not just matters of GP and hospital treatment.

A critical part of ensuring better mental health is encouraging everyone to lead a full and balanced life.

It is the stated aim of our Defence Medical Services to ensure that all personnel are "fit for task".

That is vital, of course – a fitter force is a more effective force for keeping the country safe.

But we also owe our Armed Forces people a civilised and satisfying working life.

Society is changing, and people want greater choice in how they run their lives – especially when they're caring for young children or aging parents.

So we've looked at how we can improve our current approach.

Following wide consultation, the result is the Armed Forces (Flexible Working) Act 2018.

From next April and subject at all times to the maintenance of operational capability, serving personnel will be able to request temporary periods of part-time service, and restrictions to the time they spend away from their home bases.

We expect the long-term benefits to be significant.

As well as improving our gender balance, it will give us the chance to better utilise the skills of our Reservists ...

... and help to attract and retain the best talent.

That's especially important in view of the smaller pool of 16-24 year-olds we expect to be recruiting from over the next few years.

Forces Medicine – Optimism for Future

All that applies just as much to the recruitment and retention of military medics.

As the Armed Forces Pay Review Body has recognised, this is a continuing area of challenge in some military medical disciplines – in intensive care, in rheumatology and rehabilitation, in anaesthetics, and more generally in Reserve recruitment.

We accept that – but we're making progress.

We're now meeting or exceeding our targets on recruiting Medical Officer Bursars, Cadets and direct entrants – the future of the profession.

We are also supportive of the Step into Health initiative, which aims to link NHS Employers to members of the Armed Forces community.

There are plenty of other grounds for optimism.

Conclusion

From the game-changing work of the RAMC over two World Wars – including vaccination against typhoid fever, blood transfusions, and the use of penicillin ...

... to the startling innovations pioneered by British military medics over the last two decades, which the Royal United Service Institute recognised last year as “a revolution in military medical affairs” ...

... our military medicine has led the world for over a century.

Indeed, the Healthcare Commission has said that there is much the NHS can learn from our Defence Medical Services.

It's clear that, despite the challenges of an ever-evolving threat environment, and the wider pressures on health provision ...

... the core of talent, dedication and innovation in our military medicine is still very much alive and kicking.

So I'm ending on an optimistic note. You, our military medics, continually face new challenges. Time and again, you surmount them. We at MOD are right behind you.

And the BMA's Armed Forces' Committee under [Colonel] Glynn Evans is right behind us, helping us out and – where necessary – holding us to account.

We know how much you put in. McIndoe was said to spend up to 16 hours a day on his feet in the operating theatre – and, like him, our medics are still

performing miracles in conflict situations. But you are also showing more everyday heroism:

Dealing with the burdensome but necessary demands of bureaucracy, and balancing the competing demands of military and civilian work at a time of enormous change in both. The Government is truly grateful for your contribution in the past – and is confident that the future of military medicine is safe in your hands.

Thank you.

Speech: Speech delivered at the Air Power Conference

Chief of the Air Staff, thank you for that very kind introduction. And I suppose with a grandfather who was a founder member of the Royal Air Force, and with a name like Lancaster, I probably should have joined the RAF. But it was not to be after my flying scholarship.

That's something I was forced to think about on a very regular basis as I was posted to RAF Marham to do airfield damage repair for five years. So as I got to repair the runways while pilots took off on them, I did certainly ponder my career choice I can assure you!

Equally, this morning I was pondering whether to wear an Air Force tie – only the second time I've done so. As somebody who's quite superstitious, the last time I wore it was Monday ... and by the end of the day two Cabinet Ministers had resigned. So I did think hard about it this morning, and then decided as a Royal Engineer that it was of course the Royal Air Battalion in 1911 which became the Royal Flying Corps and subsequently the Royal Air Force. So I like to think that my background as a sapper ties neatly into wearing an RAF tie today.

Tribute to the RAF

But I am absolutely delighted to be here, speaking to you in what is a momentous week. The scenes in the Mall as we witnessed the longest flypast for over three generations were simply extraordinary. And they did not go unnoticed in Parliament – especially the wonderful image of "100" set out in the sky by the Typhoons.

As many of you will have seen on social media, there is now a call in Parliament to have "It's Coming Home" in the sky next week. So, Chief of the Air Staff, I'm sure that's a challenge which the RAF is up to! But having seen the amount of time which went into delivering the flypast yesterday, I promise to push back and say we simply don't have enough time.

So many congratulations to the RAF past and present, not only for yesterday but for a century in which you have earned a reputation for bravery, tenacity and innovation.

A lot has changed in those 100 years. From the Avro 504 biplane – the first mass produced aircraft of any kind in the Great War ... and of course it was Avro which went on to make the iconic Lancaster B1, the most famous of bombers ... to yesterday, when we saw the F-35s flying down the Mall.

I have been very fortunate to work beside the RAF on operations in Bosnia, Kosovo and Afghanistan, and I am a huge admirer of the Service – a Service which right now has personnel involved in 16 separate missions, in 28 countries across five continents.

In this modern Air Force, precision firepower has helped diminish and destroy Daesh in Syria and Iraq, and to strike Assad's chemical arsenal after the appalling atrocity in Douma.

Against an ever more assertive Russia, our airmen and women are policing the Black Sea skies. They will soon be heading to Iceland for the first time, as well as back to Estonia. The Air Force also continues to keep us safe at home, and in the past decade has scrambled more than 80 times to intercept Russian military aircraft.

On the ground, the RAF Regiment are deployed with their Army colleagues in Salisbury, after the first use of chemical weapons on the streets of Europe since the Second World War

You only had to witness the crowds across central London yesterday to realise the esteem with which the RAF is held in the hearts of the British people, and I want to take this opportunity to thank you all.

Growing Threats

I started by saying that this week is momentous. But I wasn't just referring to RAF 100. As I speak, leaders are gathered in Brussels for the annual NATO Summit.

In a year in which there appears to be more at stake than in any time in recent history, we have heard a lot about the changing threats. In his annual speech to RUSI last year, Sir Stuart Peach spoke candidly, not only about the potential threats we might face at some undefined point in the future, but about the threats that we face now.

These threats emanate from a number of worrying global trends – resource scarcity, fragile states, rising populations, immigration, regional tensions, trade disputes ... I could go on. But it's not just the range of threats we're facing, but the breaking down of traditional boundaries both physical and virtual. Our adversaries have recognised this, and they are adapting.

Spin the globe and look at the world from Russia's perspective. Consider how they might view threats. And, whilst we don't know whether they view conflict

as inevitable, they are preparing.

Some commentators have suggested that Russia's use of proxy forces and hybrid methods suggest that they don't intend to get its hands dirty.

There is an alternate thesis: that Russia have concluded that they are not ready for major combat operations, that they have learnt the lessons from Georgia and the relative failure of their annexation of Crimea, and are now investing hard in the future of their conventional forces. Russia is building new supersonic bombers, and the fifth generation Sukhoi-57 fighter is now a reality.

On this basis, it is a myth to think that Russia won't use hard power at some point in the future. You only have to look at Syria to see this in action, in what has become a testing ground for the integration of Russian air, land, and maritime capabilities. Russia has at the same time been carving out an advantage in the sub threshold environment, using cyber and hybrid methods to cause disruption and to obfuscate.

With a new appetite for risk, and a new determination not to be bound by the rules of the international order, information is being weaponised to sow confusion and create tensions. Tensions that in turn create divisions and opportunities that they can exploit. And in this anarchic ungoverned space, they are calibrating their activity to understand where the threshold for international response sits.

This introduces dangers of escalation and miscalculation. Tensions once grew slowly, providing us with advance warning of potential conflict. But we can't rely on that any longer. We must be ready to respond, at very short notice, and in a wide variety of contexts.

But, of course, Russia is not our only threat. We face a multitude of other challenges: hostile states, global extremist organisations, the rise of nationalism, political fragmentation, organised crime, terrorism. And these threats have become so much more acute given the proliferation of sophisticated military hardware that was once the preserve of Tier 1 militaries.

But it's easy to be doom laden, and I agree with the Chief of the Air Staff that the RAF is well equipped to respond to these challenges, and has some exciting new capabilities on the way: seven Typhoon Squadrons, 16 new Protector drones, nine new Boeing P-8Poseidons to patrol the seas, not to mention our world beating F-35s spearheading our Carrier Strike Capability.

But what are we doing now to ensure we are well placed to face down tomorrow's threats? And how will we be judged on those decisions when the Air Force celebrates RAF 150? In looking forward to the next 50 years, there are three areas where I believe we need to focus:

Cutting-Edge Capability

First, we must maintain our cutting edge capability, and our Combat Air Strategy provides the road map for the second century of UK air capability.

Of course, we need to complete the transition from Tornado to an enhanced Typhoon, and set our operational requirements for the next generation fighter.

But we need to go further. The Air Force of the future must have full spectrum capabilities, integrated to cyberspace. One of the reasons the F-35 is so special is that it's a networked platform, able to soak up information from across every domain and build a virtual picture of the battlefield.

Full spectrum extends to space as well as cyberspace. Space is critical to our intelligence, surveillance, reconnaissance, precision navigation, targeting and synchronisation of effects. If we're going to succeed in this domain, we need to do more to protect those vital capabilities. That's why we've designated space as a Critical National Infrastructure, and we're publishing the first ever Defence Space Strategy later in summer. That's why we're raising the profile of space technology in NATO, and investing heavily: £50 million into spaceports, £10 million into small satellite constellations, and £99 million into the new National Satellite Test Facility.

We have put the RAF at the heart of this work, and it's doubling the size of its space operations at High Wycombe with the creation of the National Air & Space Operations Centre.

Part of the challenge will be to procure and produce capabilities faster than ever before. This will require new partnerships, like the collaboration between the RAF's Rapid Capability office, the Defence Science and Technology Laboratory, and the UK industry which saw us launch the Carbonite 2 satellite earlier this year to deliver high quality imagery and 3D video footage from the upper atmosphere.

From concept to launch, this took just eight months, exploiting commercial off the shelf equipment, rapid by name, and rapid by nature!

Integration of Tactics

But cutting edge capabilities are not enough. Our adversaries are now seeking to a range of weapons in their armouries against us. So future fleets must be able to integrate more seamlessly between the Services.

Since its inception, the RAF has been master of combined arms action. This has never been more important with the arrival of F-35 and the Carrier Strike platform. That's why we're already making sure that our approach to future combat air systems will be fully integrated with Carrier Strike.

But tomorrow's integration must go beyond the Services. It must extend to the whole of Government. The operation against Daesh was a case in point. While aircrews are destroying Daesh, while our troops are developing the capacity of local forces, and while our sailors are supporting allied carrier operations, other arms of Government are working to shut down finances ... to cut off access at borders ... and critically to counter and rebut terrorist false narratives.

We must make this the rule not the exception. As the Prime Minister said when she launched the National Security Capability Review in March, we have to “mobilise most effectively the full range of our capabilities in concert to respond to the challenges we face”.

That’s why we now have a Fusion Doctrine, building a culture of common purpose across Government, and shifting incentives and behaviours so we can be greater than the sum of our parts.

People

But to be able to develop the highest quality capabilities, we need the highest quality of people. Platforms have always mattered in the RAF. But people matter more. Spitfires wouldn’t have had the extraordinary success they did without the brilliance of our engineers, the dedication of our ground crews, and the daring of our pilots.

Some believe that, in the era of autonomy and AI, the pilot will become redundant. I don’t believe it. While it is easy to envisage a time when we might take men and women out of the cockpit, I cannot foresee a period when we’ll take them out of the loop.

Warfare is, and will remain, an intensively human endeavour. We will need the very best men and women more than ever to innovate, evaluate and debate – and to make tough life and death judgements.

We must think deeply about the skills required of our next generation, and how we compete for the very best of our youth ... how we train them, and how we retain them. That is why I applaud the focus of this Conference.

This new generation is likely to come from a wider range of backgrounds. We need to do more to develop the talents of every section of society, including those who wouldn’t see Defence as their natural home.

In this, we will be competing against those with bigger pockets than ourselves. So we must continue to offer exciting careers with a sense of purpose and camaraderie. If we are to retain these young men and women, we need to think about the challenges they will face – recognising the way we wage war is changing, and will be even more different in the future.

Conclusion: Inspiration

I am confident that the RAF will meet these challenges head on, as it always has. 75 years ago, the famous 617 Squadron took off from RAF Scampton to launch the “Dambusters” raid. On board those Lancasters were Barnes Wallis’ bouncing bombs, an innovation designed to destroy the dams in the Ruhr valley. That is a reminder that, whenever faced with the most intractable problems, the RAF has always responded.

The same Squadron also carried the UK’s nuclear deterrent for over a decade, and took a leading role in precision strikes on Iraq in 1991. Now they are back at Marham to fly the fifth-generation F-35 Lightning II – a fitting

reminder that innovation remains, as it always has, in the DNA of the Royal Air Force.

If you're still in any doubt of this, I would encourage you to visit Horse Guards this week where you'll see these developments – from the Spitfire to the Meteor, the Harrier to the Tornado. But, from my perspective, the tent devoted to STEM skills is the most striking. Go inside see young people captivated by all the amazing technology, with RAF men and women explaining it.

The RAF has something few other organisations have: not just the power of flight itself, but the unique capacity to make a difference across the world, and the ability to inspire. Thank you.

News story: British Military steps up Women, Peace and Security efforts

During his visit Gavin Williamson thanked troops for their work, which ranges from delivering infantry training for partner militaries tackling terrorism, to teaching soldiers how to prevent and respond to sexual violence against women.

In positive meetings with defence ministers across East Africa he said the UK is a trusted partner, committed to promoting prosperity and helping improve the security of people in vulnerable situations by increasing the participation of women and other non-traditional security actors.

He opened a Security Sector and Gender training course at the British Peace and Security Training centre outside Nairobi, where hundreds of personnel from a dozen partner nations will be trained in techniques aimed at preventing and responding to sexual violence against women, men and children in conflict areas.

As well as confirming that a small training team would deploy to East Africa specifically to help tackle sexual violence, he also agreed an extension to the British Army's infantry training in Kenya, which thousands of personnel benefit from.

He discussed the UN Mission in South Sudan (UNMISS) – where the UK has built a field hospital for peacekeepers – and how British Aid is helping support voter education, women's participation and local conflict resolution.

Defence Secretary Gavin Williamson said:

A prosperous and secure Africa is firmly in our national interest

and our Armed Forces are playing a vital role on the continent.

Whether fighting for women's rights through our training teams or suppressing terrorist threats, the UK is a nation with a big heart and we are determined to help our partners when they need us.

The incredible work our service personnel are doing from Somalia to South Sudan will help build a more secure and united continent. This will help to set the conditions for trading partnerships across Africa, supporting British and African businesses to create opportunities for everyone.

In Somalia, British troops gave a demonstration of the work being done to train Somali forces against the threat from the insurgent group Al-Shabaab, as well as explaining their contribution to the African Union Mission in Somalia (AMISOM) which aims to maintain peace within the country.

The Defence Secretary met the President of Somalia, Mohamed Abdullahi Mohamed Farmaajo, to discuss the UK's continued training to tackle gender-based violence and suppressing the Al-Shabaab threat.

Later in Ethiopia Mr Williamson met UK personnel and representatives of agencies working to combat violence against women, as well as making progress on UK-Ethiopian areas of co-operation in talks with Ethiopia's Defence Minister Motuma Mekassa.

Press release: Potential phishing scam impersonating Ministry of Defence

The MOD has been made aware of a possible phishing fraud. Targets of the fraud have received emails purporting to originate within the MOD attempting to make contact or seeking money.

Anyone who receives suspicious emails that might match this profile should take the following action:

- Not to respond to the suspicious communication, or cease all further correspondence if they have already responded
- Report it to Action Fraud, the UK's national fraud and cybercrime reporting centre which can be contacted at www.actionfraud.police.uk or on 0300 123 2040.