

MIN AF – AIRPOWER CONFERENCE

TRIBUTE TO TODAY

...., I feel very fortunate to have worked closely with the RAF operations in Bosnia, Kosovo and Afghanistan and am a huge admirer of the Service that...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's hold on territory 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 in Romania....will soon be heading to Iceland for the first time....and back to Estonia.

...the air force continues to keep us safe closer to home....and in the past decade alone our fast jets have been scrambled more than 80 times to respond to Russian military aircraft.

...and on the ground RAF Regiment personnel are deployed alongside the Army using their expertise to clean-up in Salisbury after the first use of chemical weapons on the streets of Europe since the end of the Second World War.

...you only had to witness the crowds across central London yesterday to realise the esteem with which the Royal Air Force is held in the hearts of the British people...and I would like to take this opportunity to thank you all.

AN ERA OF UNPRECEDENTED THREATS

I started by saying this week is momentous....but I wasn't just referring to RAF100. As I speak leaders are gathered in Brussels for the annual NATO Summit, in a year in which there appears 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 Air Chief Marshall Sir Stuart Peach spoke candidly not of *potential* threats that we *could* face at some undefined point in the future, but threats that we *do* face now...

...these threats emanate from a number of worrying global trends: resource scarcity, fragile states....rising populations, migration....regional tensions, trade disputes, hostile states....I could go on...

...but it's not just the range of dangers we're facing but the breaking down of tradition boundaries, 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 it doesn'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 5th Gen 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.

RAF IS WELL EQUIPPED TO RESPOND NOW

It is easy to be doom-laden....but 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....

....7 Typhoon Squadrons ...

... 16 new Protector drones ...

.... 9 new Boeing P-8 Poseidons to patrol the seas ...

....not to mention our world beating F-35s, spearheading our carrier strike capability.

...BUT WHAT ABOUT TOMORROW?

... but what we are doing now to ensure that we are well placed to face down tomorrow's threats?...and how will we be judged on these decisions when the air force celebrates RAF150?

....In looking forward to the next fifty years, there are three areas we need to focus....

1. CUTTING EDGE CAPABILITY

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

....Of course, we need to complete the transition from Tornado to an enhanced Typhoon, and to 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 into cyberspace....

....One of the things that makes the F35 so special is that it's a networked platform, able to soak up information from across every domain to 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 are going to succeed in this domain we need to do more to protect these vital capabilities

....That's why we've designated space as a Critical National Infrastructure, and why we're publishing the first ever Defence Space Strategy later this 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 is doubling the size of space operations at High Wycombe with the creation of the National Air & Space Ops Centre.

Part of the challenge will be to procure and produce capabilities faster than ever before...

...this will require new partnerships of the sort developed between the RAF's Rapid Capability office, DSTL and UK industry that 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, rapid by nature.

2. INTEGRATION

But cutting edge capabilities are not enough...adversaries are seeking to use a range of weapons in the armoury against us...so our future fleets must be able to integrate more seamlessly between the Services.

Since its inception, the RAF has understood the importance of combined arms action...and that has never been more important with the arrival of F35 and carrier strike platform...this is why we are already making sure our approach to future combat air systems will be fully integrated with carrier strike...and the same will be true of the Land environment. But tomorrow's integration must go beyond the Services...it must extend to whole of government...the operation against Daesh is a case in point.

While aircrews are destroying Daesh, troops are developing the capacity of local forces, sailors are supporting allied carrier operations, whilst other arms of Government are working to shut down finances, cut off access at borders, and critically, to counter and rebut terrorist false narratives....

...we must make this the rule and 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". This is why we have a Fusion doctrine....to build a sense of common purpose across Government, shifting incentives and behaviours so that we can be greater than the sum of our parts.

3. PEOPLE

...but to be able to develop and harness complex capabilities, and the empathy and vision to integrate them, we need the very highest quality people...

....platforms have always mattered in RAF....but people matter more....

Spitfires wouldn't have had the extraordinary success they did without the brilliance of our engineers, dedication of our ground crews and daring of our pilots...

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

....Warfare is, and will remain, an intensely human endeavour and we will need the very best servicemen 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 the next generations...and we must think deeply about 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 are likely to come from a far wider range of backgrounds....we need to do more to draw on the talents of every section of society, including those who wouldn't necessarily see Defence as their natural home...

....we will be competing against those with bigger pockets than ourselves...so we must continue to offer exciting careers, that have a sense of purpose, opportunity, and camaraderie...

....and to retain these young men and women, we need to think about the unique challenges that they are going to face.... recognising the way we wage war now is already changing and will be even more different in future....

... the demands placed on our RPAS pilots are already very different from those of our fighter pilots

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... 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 from Iraqi skies in 1991.

.... Now we are returning to RAF Marham to fly the 5th-Generation F-35 Lightning II...a fitting reminder that technology, innovation and evolution remain, as it always has been, in the DNA of the Royal Airforce....

...if still in any doubt of this, I would encourage you to visit to Horse Guards this week, where you can see these developments....from the Spitfire to the Meteor, to the Harrier and the Tornado....

....but from my perspective the tent devoted to STEM skills is most striking. Go inside and see young people captivated by all the amazing technology and the RAF men and women explaining it to them...

...the Royal Airforce has something few other organisations have...it is not just the power of flight itself... but the unique capacity to make a difference across the world and the ability to inspire