

**A speech by Air Chief Marshal Sir Stephen Hillier**

**Chief of the Air Staff, Royal Air Force**

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***A 'New' and Exciting Royal Air Force Towards its 2<sup>nd</sup> Century***

**Introduction**

This Institution has been at the forefront of defence and security thinking since its foundation as the Naval and Military Library Museum in 1831. It stimulated and maintained a most vigorous military membership who saw in it a forum - the only forum - where military policy could be discussed and questioned among fellow professionals regardless of rank or title. This afternoon, 185 years later, I'm delighted to be sustaining that professional environment by delivering the 2016 Lord Trenchard Memorial Lecture.

When Lord Trenchard outlined his detailed plans for the formation of the Royal Air Force in 1918, he was very careful to ensure that this new Fighting Service learned as much as it could from the experiences of its older siblings. But he also realised that his Fighting Service would be new and exciting, and that its focus would need to be firmly on its future; cognisant of its roots but always thoughtful about where it was going.

Today, that is exactly what I'm going to talk to you about – the still 'new' and still very exciting Royal Air Force that I have the tremendous privilege of leading into its second Century.

Almost a year ago, the outcome of the Strategic Defence and Security Review tasked the Royal Air Force significantly to grow its capability again, something I don't think we've had the opportunity to do for generations. It did so because the utility of air and space power in helping the Nation to meet its 21<sup>st</sup> Century defence and security challenges is very well recognised and understood.

That manifests in a consistently high demand signal for our outputs – the Royal Air Force has rarely been busier on operations. Today, every Force I have is committed to operations – our personnel are in 25 countries, spread across 4 (sometimes all 5) continents, and engaged in more than 15 concurrent operations. And those operations are very much 'live' and underway, right now, as I speak. Be that in the skies over Iraq and Syria. Or from here in the UK. Or in

projecting UK air power and influence rapidly and globally, as we're doing on exercise in East Asia at the moment.

But supplying the air power to meet that high demand signal and, simultaneously, growing our capability isn't easy and requires us to adapt. And so in this lecture, I want to explore some of the innovation and initiatives the Royal Air Force will need to pursue in order to successfully manage that change. Not some revolutionary transformation, but a continuation of the adaptation and flexibility which defines us as an organisation.

## **Context**

The situation faced by the Royal Air Force today is, in many ways, rather enviable:

The operational demand for our capabilities is consistently high and our ability to apply air power at the Tactical level on operations is widely acknowledged to be world-leading.

Our 'front-line' is planned to grow in a way not seen for generations.

We have a highly talented and motivated workforce which would be the envy of any organisation.

We have a strong reputation, not least for our safety culture and as a Service which delivers successfully, without fuss, on operations and in the business space.

And our approaching 100<sup>th</sup> Anniversary provides us with a unique opportunity to reinforce the Service's traditions and ethos.

But within these strengths also lie our vulnerabilities and risks. How do we:

Sustain such a high level of operational output?

Harness innovation and realise the people and financial efficiency gains necessary to grow the front-line?

Recruit, train and sustain the people we need, and give them the levels of challenge and responsibility they seek?

Ensure that our good reputation and licence to operate do not unravel through poor safety risk judgement or an inability to navigate our way through financial pressures?

Difficult questions to answer and the challenges they set do not come at us individually; they are over-lapping and inter-connected and demand a coherent, co-ordinated response.

## **Approach**

Let me start to address these issues and challenges by explaining our approach.

Firstly, we do not need to change how we deliver air power at the Tactical-level on operations, at least in the short term. That is our considerable strength and the foundation of our professional reputation, and something we must constantly seek to support and reinforce.

Operation SHADER, the UK's contribution to the US-led operations against Da'esh, is a constant, daily reminder of who we are, what we do and what we are for. I am incredibly proud of the professionalism, energy and commitment of the Whole Force Royal Air Force to that operation. Every day, the ISTAR Force is providing 30-40% of the Coalition's total ISTAR output. And the Typhoon and Tornado Forces, augmented by our remotely operated Reaper, have conducted approaching 1100 strikes in the 2 years since we commenced offensive operations.

I can then add to this picture of tactical excellence from all of our Air Defence missions: in the South Atlantic; over the Baltic States; against potential rogue airliners entering UK airspace; or in response to Russian Federation aircraft testing our National air defence resilience, something they have done around 10 times annually in strong echoes of the Cold War period.

And the vital support which our air transport, air refuelling and support helicopter forces provide – there's effectively no operation or exercise which doesn't have a huge dependency on their vital capabilities.

Our excellence in the practical delivery of air power cannot and will not change; it is what defines the Royal Air Force.

But in looking at our wider, supporting issues, not least addressing the people challenge, we must act now and give ourselves the best chance of success.

We should recognise that the operational tempo will be enduring.

We must recognise where the RAF Whole Force has unique needs in Defence – a one-size-fits-all Defence approach may not offer the nuance that I need. But also where its challenges, and the potential solutions, are pretty much the same as other organisations – and be prepared to learn accordingly.

We need to question every aspect of its requirements and how we currently do our business. In so many ways, we really do need to consider how we can make our problems easier to solve – we too often see our challenges as being only supply-side, without applying equal rigour to the demand-side, right from the start.

We must find the financial and manpower efficiencies from within in order to create sufficient headroom to grow.

We must be prepared to take hard decisions and measured risks to give us the essential headroom to pursue alternative solutions.

We must ensure our plans are truly realistic, affordable and deliverable.

Above all, the Royal Air Force must seize the unique opportunities now in front of it. It can do so by living up to its headlines of being ‘agile, adaptable and capable’, and in my mind, to which must now be added ‘innovative and imaginative’.

### **Aiming points**

Let me now turn to our aiming points.

The strategic goals of Joint Force 2025 announced in last year’s Review are already well-defined and announced for the RAF but let me briefly re-cap the headlines:

In the combat fleets we will form 2 additional Typhoon squadrons; buy 138 F-35 Lightning II and plan to create an additional front-line squadron by 2023 – the RAF’s planned fast-jet squadrons increasing by 50% as a result – and, to develop an Unmanned Combat Air System technology demonstrator with France whilst continuing parallel national investment.

In the ISR fleets, we will replace Reaper and double its fleet size with the Protector RPAS – to those who still say, so what are you doing about unmanned, I would say look at where we were a decade ago and look at where we are now and are going next. We are buying 9 Boeing P-8 Poseidon aircraft; upgrade the E-3D Sentry and extend it in service until 2035; expand the Shadow and Rivet Joint fleets and extend their service until 2030 and 2035 respectively, expanding crews in both cases; improve our Space Surveillance Network; and develop a high-altitude pseudo-satellite capability.

And in the air mobility fleets, we will complete the introduction of 22 A400M Atlas aircraft and 14 Voyager AT/AAR aircraft including adapting one Voyager for the VVIP transport role; upgrade 14 C-130J and extend them in service; enhance C-17 Globemaster capability; and upgrade the Chinook helicopter.

I could go on, but hopefully the message is clear. The aiming point for this RAF capability growth is defined by Joint Force 2025. The purpose is to give the UK the ability to fight in the Information Age and a greater ability to undertake the most difficult missions, across the spectrum of potential conflict, alongside our NATO and other Allies.

And the recapitalisation effort that has been ongoing since 2010 this means that most of our new equipment will still be in service come 2040. That's why we must get it right today because we will be living with the consequences for years to come if we do not.

What's vitally important is that we must be well-advanced in delivering these goals and growing the Royal Air Force over the next 5 years. That's partly because we quickly need these extra capabilities for our operational commitments. But it's also because if we are not progressing strongly on the growth path set out in 2015 by then, we can hardly expect to attract further new investment in the Royal Air Force in the SDSR of 2020.

This very clear 3 to 5-year timeline and the intense practical focus it implies must therefore be at the core of our growth strategy.

But we must also think beyond pure force structure delivery and more about the sort of Royal Air Force we wish to be in 2025 and beyond:

We need an Air Force which matches outstanding tactical delivery of air power with its thinking lifted also to the Operational-level, and with its future Command and Control capabilities developed accordingly.

We must have a better understanding of how our new air power capabilities will be integrated and operated, either in the air environment or across domains – not least in Space and Cyber – as part of future Joint and Combined operations.

That will place integrated information capabilities at the heart of our future.

The stand-up of our new Joint Air Operations Centre, or JAOC, at High Wycombe is one example of our thinking in this area. It will provide the Air C2 capacity and capability to execute National missions, in isolation or in concert with other Joint Headquarters and Allied partners. It will be able to support the UK's Joint Force Air Component Commander's operations, live or exercise, up to medium-scale. And in time, it may also offer the UK an increasingly capable, centralised Air C2 capability providing an alternative to a deployment of forces – the idea that our C2 always needs to be close to the deployed forces does not feel entirely consistent with the Information Age.

Time is, and will increasingly be, of the essence. Our acquisition process will need to keep up, especially for information capabilities. That's one of the reasons why we're establishing a Rapid Capabilities Office, or RCO, within HQ Air Command. Its purpose – over a 2 year-long trial – is to drive innovation and capability delivery. And it will do so by harnessing the extraordinary and diverse intellect that already exists within Defence and its partners by exploiting commercial-off-the-shelf technologies and its military-off-the-shelf equivalent. Through rapid, controlled testing, the RCO will allow us to also fail fast, learn and move innovative capability enhancements forward quickly. This initiative is very much complementary to the Defence Innovation work, and I look forward to developing proposals which allow us to tap into the significant funding stream which Defence has created to develop new approaches to our capability challenges.

### **People challenges**

But in all this, there's the risk that we get pre-occupied by the technology, and use our equipment plan as a metaphor for the RAF we want to be in the future. Don't get me wrong, the technology is vital for maintaining our operational advantage. But as others catch up with us in technology, we need to hold on to that other vital part of our decisive edge – our people and our training.

It is their superb individual and collective skill, professionalism, commitment, self-discipline and judgement which sets them apart – and we need to protect that, in equal measure to our

technical capabilities, in order to keep our decisive edge as an Air Force. That's one of the reasons why I say that there's currently nothing more important to the senior leadership of the Royal Air Force than addressing the people aspects of our strategy.

Let me briefly outline that people challenge. Overall, the outcome of SDSR is that I need more people than I have at the moment and a higher aggregate level of skills across the RAF than before – aircrew, engineers and intelligence analysts to name but a few.

These sorts of skills are in high demand. So we must work harder than ever before to attract and recruit. We have a good package to offer – challenge, excitement, opportunity, responsibility, variety. As the adverts in our recent recruitment campaign say – it's 'no ordinary job'. But the competition for good people is becoming ever fiercer.

We need to ensure we recruit a truly diverse range of personnel. Not just for the sake of meeting a target, but because it is only by drawing on the diversity of the British population will we ensure that we have the different range of talents and perspectives that we need. We will need those different talents and perspectives to become an organisation fit for the challenges of the 21st Century, flexible and adaptable, that makes the most of what everyone in the Service can contribute.

We are making progress: through an Intelligent Recruiting initiative, which exploits geographical demographics and known recruiting opportunities, female and ethnic minority recruiting is up by 76% and 100% respectively. And 2 weeks ago, I'm proud to say that the RAF won a national diversity award for our recent successes in recruiting.

We must also make it as easy as possible to join the RAF in general. We need to lessen constraints on how we recruit and employ the force, making balanced risk judgements accordingly. We must make the process seamless, and respect that the priorities of today's youth are perhaps not the same as those of perhaps my generation, or the generation before. We must, above all, be flexible.

We also need to make the most of a pool of talent which is currently almost entirely untapped – those who have left the Service to pursue other challenges, but who may now wish to return. Why not? This is what industry does on a daily basis. Perhaps in the future people will be able to move in and out of the Armed Forces as part of a "portfolio career", as easily as they currently move between private sector employers. Perhaps industry colleagues would wish to

explore such opportunities with us, because I sense the benefits could very much work both ways.

But we cannot just see this as only a supply problem. We must also address the demand side, ensuring that we rigorously examine our requirements and exploit technology, to give ourselves the best prospects of success.

We need to consider how we train, to ensure that we spend only the time in training that we need to, minimising the time to – and maximising time on – the front-line.

And thereafter we must try to keep our people for as long as possible – for the RAF, it's typically around 16 years at the moment – but retention is also becoming more difficult. Sustaining a high operational tempo must be done with an appropriate balance if our people are not to burn out and leave.

And what we really must also do is fully realise the huge potential of all the people in the RAF. The quality is already superb – any organisation would envy us for the skills and commitment of our Whole Force of Regulars, Reservists, Civil Service and contractors. It's certainly a challenge – but in many ways, what a great challenge to have.

Finally, we need to do better with our infrastructure, which is both an operational and a people issue. We will seek to recover the RAF's previously high reputation and work towards an estate which we own and which is smaller and more efficient, to allow us to better target the investment we are prepared to make.

Meeting our strategic workforce challenges, across the Whole Force of people, is therefore my highest leadership priority. Easy to say, but hard to deliver against. The work has started, and it will not be enough simply to keep running our current models, and definitely not simply a case of asking everyone to work harder.

We cannot meet all these challenges alone. We will work in close co-operation and with a sense of shared endeavour with the rest of Defence, international partners and industry, to ensure that we deliver the highest quality outcomes for the Nation. I look forward to doing so.

## **Conclusion**

In conclusion, the Royal Air Force that I have the privilege to lead is doing extremely well. We are in very high demand, and planned to grow in order to allow us to deliver even more to Defence and the Nation.

Our challenge is simple: to meet our operational demands and seize the opportunity for growth which has been presented to us. Success or failure in that endeavour will depend primarily on our ability to meet our strategic workforce challenges.

We must energise our processes, change where necessary, and focus on opportunity as much as risk, to give ourselves the very best prospects of success.

This has very much been a personal view and so let me finish by offering you my personal ambition for my next 3 years in command of the Royal Air Force, which are:

- To lead the Royal Air Force well and ensure that we deliver the air power that UK Defence needs on its military operations.
- To grow the Royal Air Force for the first time in generations.
- And to recruit, train, sustain and retain the people that the Royal Air Force needs for its 2<sup>nd</sup> Century.

## **Trenchard**

Finally, having got this far, you might reasonably ask where all this fits in a Trenchard Memorial Lecture – where is the connection between the father of the Royal Air Force and what his successor, precisely 30 CASs later – is planning?

Well, as the RAF now moves towards its 2<sup>nd</sup> Century, I recognise that my challenges are not precisely the same as Trenchard's. But I rather hope that he would see the connections. For in outlining in 1919 his principles for the permanent organisation of the RAF, he spoke about the following:

- Concentrate on providing for the needs of the moment and on laying the foundations for the most highly trained and efficient force.

- Reduce service squadrons to the minimum essential, and concentrate the whole of the remainder of our resources on ... on officers and men.
- Secure economy.
- It is very necessary to provide a Reserve.
- The extreme importance of training.
- And of research.
- The necessity for large capital outlay on accommodation.

Perhaps most importantly of all though, the majority of his words were reserved for how to recruitment, train, qualify and imbue officers and men with the spirit of the airman and of the new service. A spirit of the new and innovation and imagination.

As the RAF moves now towards its second century, I rather think that Trenchard would have approved of the emphasis that we continue to give in these areas, to keep sustaining the RAF of today. With strong roots in our past, but still young and forward-looking – growing the RAF of tomorrow.