FIRST SEA LORD'S SEA POWER CONFERENCE 2024

CONFERENCE PROCEEDINGS | 14th-15th May 2024


FIRST SEA LORD'S
EA POWER CONFERENCE 2024
#SPC2024
Council on Geostrategy
ROYAL NAVY
Council on Geostrategy
ROYAL NAVY


RENCE 2024
FIRST SEA LORD'S
SEA POWER
ROYAL NAVY

Contents

Foreword

The 2024 Sea Power Conference, and the other events that happened for London Sea Power Week, were feats of planning and I am grateful to the Council on Geostrategy, King's College London, and all those who gave their time and energy to bring them together. As part of a week of events in this year's London Seapower Series, the Royal Navy has also co-hosted a conference celebrating NATO's 75th anniversary, reflecting on the Alliance's past and looking to the future and the challenges ahead.

Over the two days we explored some of the most pressing and multifaceted challenges and opportunities facing those of us with an interest in the maritime domain. The maritime really matters. The United Kingdom is not just an island-nation, but a maritime nation. Our history, and our future, depends on the sea and access to the trade, energy and data that flows on or under it. Maritime security, from the Euro-Atlantic across every ocean to the Indo-Pacific, will matter more than ever as we look to the 2040s and beyond.

But the maritime domain is increasingly under threat, as all here recognise. More than two years on from Russia's invasion of Ukraine, the world is forever changed. The norms of behaviour upon the seas which have enabled globalisation to flourish, and the wider open international order of which they are a part, are increasingly under threat. Whilst Russia's Army is being greatly diminished, it will likely emerge from Putin's illegal war with its navy and nuclear forces broadly intact. We should be as prepared for a Chinese tilt to the West, as we are steadfast in sustaining our own position in the Indo-Pacific, and there is an underlying risk of escalation in the Middle East where terrorism and Iranian state-sponsored proxies seek to upend a delicate balance. We are working closely with our allies to promote regional stability as well as supporting the opening of a maritime corridor for humanitarian assistance to Gaza.

Amidst the many challenges, all is not gloom. The ongoing re-capitalisation of the Royal Navy is driving a revival of maritime manufacturing in the United Kingdom. And I believe we have a generational opportunity if we can unlock the potential for unprecedented technological advantage through a truly international collaboration between militaries, industries, and academia. Our nation can, with our allies and partners, provide thought leadership through our world-class universities and think tanks. And the United Kingdom has one of only three £1 trillion science and technology sectors globally. We have the chance to complete a transformation of the

Royal Navy as significant as the one from sail to steam, or coal to oil. As the Royal Navy looks ahead and prepares to fight and win, 2040 is our headmark.

The discussions held over the two days sought to improve our understanding, reflect on new ideas and develop our thinking as partners and allies drawn from around the world and across our broad maritime community. My intent was that this conference proved to be a powerful contribution to charting a way through the many challenges we face, but also the opportunities that we have.

Admiral Sir Ben Key KCB CBE ADC
First Sea Lord and Chief of the Naval Staff, Royal Navy

Keynote speeches

Arsenio Dominguez

Secretary-General, International Maritime Organisation

Excellencies, distinguished participants, ladies, and gentlemen,

It is a great pleasure to be here today. I wish to extend my deep gratitude to the First Sea Lord, the Royal Navy and the Council of Geostrategy for hosting this event and inviting me to speak.

Today, we are here to contemplate the future of Shipping, but first, I would like to take a moment to discuss the past.

For centuries, our industry has been the primary means by which nations and people exchange not only goods, but also ideas, traditions, and cultures. The economically and culturally interconnected world we live in today owes much to the maritime industry and the dedicated seafarers who form its backbone.

Across generations of resiliency and innovation, our sector has been refined into a beacon of efficiency. Consequently, maritime trade dominates global commerce.

Despite the critical impact our industry has on people's livelihoods, it is only recently that international events, like COVID-19 and geopolitical situation, have brought seafarers and maritime issues into the public spotlight.

I firmly believe that we possess the resources and skills to tackle the challenges that we are being presented with. More than that, it is past time that the seafarers of the world get the recognition they deserve for their critical role in transporting, from one part of the world to the other, everything from lifesaving food and medicine to computers and smart phones.

At the International Maritime Organization (IMO), we often say: No Seafarers, No shipping.

And in light of recent geopolitical events, I want to stress:

Without seafarers, there is no shipping, and without shipping there is no international trade.

It is both a moral imperative and strategic necessity for our industry that we unite to ensure the safety and security of those who serve at sea.

All Member States have to work together and coordinate with the industry to ensure the security of navigation while respecting the principles of international law on the freedom of navigation.

I would like to take this moment to condemn the attacks once again against merchant vessels and their crew in the Red Sea. These attacks are categorically unacceptable, and we need to work together to protect seafarers in the region.

International shipping must not be targeted and used as a mean of exerting pressure in geopolitical crises.

Tomorrow, I will open the Maritime Safety Committee meeting at IMO, where this and issues such as piracy, will be discussed at length. Through discussions with all Member States, we can identify appropriate solutions.

Supporting the coastal states of these regions in implementing the IMO's instruments is important. The IMO remains committed to providing capacity building assistance to Member State in the implementation of maritime security measures, such as through the IMO's Global Maritime Security Integrated Technical Co-Operation Programme.

We are on a pathway to decarbonize the sector; enhance safety and security and be truly sustainable.

I wish to emphasize that the safety and well-being of seafarers remains of the utmost importance to us. The IMO, in coordination with our Member States, will continue to work diligently to ensure the safety of those who serve at sea.

I wish to reiterate my sincere appreciation to the organizers of this Conference, and for their unwavering commitment to safeguarding seafarers and upholding international law.

I look forward to our continued efforts to overcome existing, new, and future challenges and opportunities that will be presented to the shipping industry. Let us ensure the maritime industry's continued stability and resilience for decades to come.

Thank you.

Keynote speeches

The Rt. Hon. Grant Shapps MP

Secretary of State for Defence

First Sea Lord thank you very much. Two weeks after I became Defence Secretary a storm shadow missile slammed into a Russian Kilo-class submarine in an occupied naval base in Sevastopol, Crimea. Just over a month later, the Destroyer USS Carney intercepted three missiles and eight drones in the Red Sea launched by the Houthi militant group. And before the year was out, the incredible crew of HMS Diamond were themselves intercepting multiple Houthi attack drones, all as part of Operation Prosperity Guardian.

As many of you will know this was the Royal Navy's first anti-air engagement for more than three decades. Something they've subsequently had to repeat on multiple occasions. And when I met the ship's company aboard HMS Diamond in the Red Sea in January, I thanked them for their commitment, courage, and professionalism. And for everything they're doing to protect freedom of navigation, and therefore prices in our shops at home.

Speaking to them, I reflected on the essential role of our Royal Navy. In our national security, the world order and our broader way of life.

Now, the situation that unfolded in the Red and Black Seas has challenged some long-held assumptions. But it has also confirmed that the path we are taking to modernise our Royal Navy and know that is the right thing to do. And today I want to explore both sides of that coin.

Not long ago, big states with big navies dominated maritime security. However, with almost 30% of Russia's Black Sea Fleet either damaged or destroyed and the rest cowering out of the reach of Ukraine's ghost fleet of missiles and drones.

And with the Houthis primarily using inexpensive drones to place a chokehold on global trade worth around a trillion dollars a year it is clear, very clear, that we are operating in a new military age.

And so the question that we must ask ourselves is how do we ensure we don't find ourselves on the back foot in any future naval conflict, just as Russia has in the Black Sea?

But also, how do we retain freedom of navigation when under attack by those hellbent on holding global shipping lanes hostage?

Well, part of the answer resides in recent decisions made by the government to help overcome these challenges. In particular, our move to a quicker and more agile pan-defence procurement model and our decision to ringfence at least 5% of our defence budget for R&D over the next few years.

These steps will help deliver the technological edge we need in the years ahead such as our DragonFire laser which we have said will now be delivered five years ahead of schedule by 2027. Helping us preserve our naval strength and capability not just in times of peace but also in times of tension and times of war.

Now of course, chief among our capabilities is our Continuous at Sea Nuclear Deterrent now in its 55th year of unceasing operation making the Royal Navy the cornerstone of our national defences and of our national security. To protect that legacy we are investing up to £41 billion in our next generation Dreadnought fleet and making good progress with our UK nuclear replacement warhead.

Meanwhile our Astute Class, of conventionally-armed, nuclear-powered hunter-killer submarines continue to roll off the production lines, with five now complete and able to hit threats on land with Tomahawk cruise missiles and threats below the water with Spearfish torpedoes.

I had the honour to tour HMS Astute in Scotland last Thursday, and heard about her best-in-class weapons capabilities can be used. And in March I was in Australia to see how we are also making progress with our next generation attack submarine - SSN-AUKUS. It's great to have our friends here from Australia today.

All of which brings me to the second key lesson from events in the Red and Black seas. The importance of alliances with like-minded partners. And in terms of our naval alliances, I believe we are more integrated with a wider range of global partners than ever before.

In Europe and the Atlantic our Carrier Strike Group headed by HMS Prince of Wales and the Fleet Air Arm, alongside seven other British vessels and more than 2000 sailors and marines including 45 Commandos recently made our Royal Navy the dominant naval component of NATO's Exercise Steadfast Defender.

Meanwhile in the Mediterranean, RFA Lyme Bay has delivered lifesaving UK aid to Gaza. And in the Red Sea HMS Richmond, Diamond and Lancaster along with RFA Cardigan Bay have cooperated flawlessly with our US counterparts.

In the Indian ocean, RFA Lyme Bay and RFA Argus have been conducting training and regional engagement exercises with our elite Royal Marines. And further East, HMS Spey and HMS Tamar have enforced sanctions against North Korea, supported freedom of navigation in the Taiwan straits, and safeguarded critical infrastructure in the Indo-Pacific.

Simultaneously, in the Caribbean HMS Trent has worked with the US authorities to conduct major drug busts resulting in seizures worth around half a billion pounds. And all the while, HMS Forth is permanently patrolling around the Falklands.

Yet, despite this global footprint, there are those who argue that we should somehow lower or shrink our horizons. And perhaps concentrate on security in our Euro Atlantic backyard.

I have to tell you I fundamentally disagree.

Our island nation is exposed to the world order and when household finances and our economy are so dependent upon global trade, we simply cannot afford to have anything other than a global perspective on the world. And as shipping lanes in the Arctic become increasingly available, the need for like-minded democracies to protect freedom of navigation

is only likely to increase.

This necessity to both think and act globally reinforces the need to make interoperability the cornerstone of our naval partnerships. And to continue to do that we have to get the nuts and bolts of the operations right. And that starts with expert and motivated people.

As someone who arrived at the MOD with my eyes very much wide-open about the recruitment challenges facing defence, I believe the Ministry is finally gripping these issues through the Haythornthwaite review we are already well into the implementation.

And Royal Navy applications, job applications are up, and our new recruit training facilities are the busiest they have been in 8 years. And we have more than halved our processing time. So that's an important part of it bit we also need to retain personal as well. And that is why we have committed to invest over £4 billion in military accommodation over the next decade.

Importantly we have also increased renumeration so the lowest paid will be around 10% better off, in fact they are this year. Free Wrap Around Childcare for service families, the Service Pupil Premium plus and our ongoing reforms to make careers more flexible and much more rewarding.

Now, the other side of all of this is kit. And our transformation to ensure we are a high-capability fully-interoperable and digital is essential.

In a few weeks' time the eyes of the world will turn to Portsmouth to mark D-Day 80.
In advance of that anniversary of the most extraordinary of amphibious landings.

I am delighted, delighted to announce today that I have given a green light for the acquisition of up to six new Multi Role Support Ships. These will replace all of our current amphibious fleet. Providing more flexibility more cutting-edge technology and better support to our amphibious and littoral strike operations.

These ships will ensure our extraordinary Royal Marines have the versatility, the heavy-lift capability, that they need to continue being the best…Per Mare, Per Terram…by sea and by land for generations of Commandos to come.

The MRSS programme is an important milestone in our Future Commando Force modernisation programme. And it takes the number of Royal Navy vessels in design, on order or under construction to 28. Which will require a very big expansion in our shipbuilding capacity because I am determined will be built here in the UK.

And to ensure we have the skills needed, we are in negotiations to sell HMS Argyll which has served so brilliantly but, it has to be said, for about twice the lifetime expected, to BAE Systems for them to use as a training facility for apprentices. Establishing a shipbuilding academy as a major boost for the sector, a major boost for skills and jobs and a major boost for Scotland.

Our commitment to MRSS and up to 28 new ships and subs for our Navy really does cement this as the new Golden Age of British shipbuilding. Turning the tide on a shrinking fleet. Securing tens of thousands of jobs in coastal areas across the UK. Equipping our country with the next generation nuclear deterrent. Equipping our Royal Marines with new versatile warships.

Events in the Red Sea really do highlight the need for sea to land capability. So today I can announce that in the future we will be equipping our Type 26 and Type 31 frigates with land strike capability. Ensuring our Royal Navy can protect our interests and get the job done wherever and whenever they are called upon to do so.

And furthermore, in the new golden age of shipbuilding, this is also a golden age for shipbuilding exports. Demonstrated by the fact that over the past decade the value of naval exports from UK shipbuilders has been greater than any other country in the world. And the

number of exports currently is also greater than any other country.

Earlier, I said our Continuous as Sea Deterrent made the Royal Navy the cornerstone of our national defences and our national security. That I have to say actually underplays their role.

You might ask why. Well, sometimes people will claim there's no point in our nuclear deterrent, but actually in this job, I know they are wrong. Without our Continuous At Sea Deterrent, we might be less likely and less willing to intervene for good in the world.

Let me ask you this question. Would Ben Wallace and I have been so willing to be able to play a leadership role in Ukraine without the insurance of our Continuous as Sea Deterrent?

Would UK defence have given Ukraine the NLAWs and Storm Shadows needed to defeat Russia's invasion, without our Continuous as Sea Deterrent?

Which begs the question, would Ukraine even still be in this fight for their freedom and sovereignty without the confidence that the deterrent delivers to us?

I know for a fact that gifting Storm Shadow missiles to Ukraine have enabled our brave Ukrainian friends to push back Russia, reclaim the Black Sea, restart grain exports and make food cheaper and more accessible for some of the poorest in the world. And that decision made easier because of our Continuous as Sea Deterrent. But it's not just about equipment.

I also know that taking the decision to stand up the Houthis is much easier when I know we have the most professional and committed Navy in the world to call upon.

Four months ago, standing right here in Lancaster House, I made a speech where I warned we were living in a far more dangerous world, post-war to pre-war I said, and I started a national conversation with others about defence spending.

Last month, the Prime Minister increased our defence budget to 2.5% of GDP delivering a £75 billion boost to defences over the next six years. That will help fund our next generation nuclear capability, a new golden age of shipbuilding - securing the place of the Royal Navy at the heart of our national defences for decades to come.

Those listening know that the defence of the realm is quite simply the first job of any government. But you can't just wish for it. It requires you to commit the resources to it and set out a plan for how you will pay for it as well which is what this government has done.

So, I want to directly address every single member of our Royal Navy. To say thank you. Thank you for everything you do and will continue to do. Not just for our security, freedoms and prosperity - but the security, freedom and prosperity of people right around the world.

To those brave men and women, I say you are simply world-class. Thank you.

Keynote speeches

The Rt. Hon. Anne-Marie Trevelyan MP

Minister of State for Indo-Pacific, Foreign, Commonwealth and Development Office

First Sea Lord, Council for Geostrategy – thank you for bringing us all together once again, here at Lancaster House, our small residence that the Foreign Office likes to use to welcome our international friends and allies. I am delighted to have the opportunity to share a few thoughts in my capacity as Minister for the Indo-Pacific, and as a well known and often teased strong advocate of our Royal Navy. I mean, if there is an opportunity to go to sea, perhaps that will be the solution to many people's challenges. I am always happy to take up that challenge.

But first, I would like to thank you and all those who serve in the Royal Navy - above and below the surface - for all that you do to keep our citizens and UK interests secure every single day.

All too often, the Royal Navy's continuous deployments go unnoticed, unknown to most and therefore unsung – though we in this room certainly understand the reasons why that must often be so.

It has been interesting as a politician, as someone with a constituency, to watch those who never knew, or asked, what your sailors do, sit up and watch in amazement as young men and women aboard HMS Diamond shared the dramatic images of their elimination of drones attacking civilian shipping in the Red Sea.

In awe, and honestly with pride, the Royal Navy and her exploits are being talked about in the pub (I can guarantee that one) and on dog walks by middle-aged ladies (because I went on one just the other day), as young and old are reminded of the threats to our assumed way of life.

Nor has the tireless work of our Royal Navy gone unnoticed by our adversaries, or those whom they seek to crush – as the challenges proliferate, we see your men and women step up across vast areas of ocean and an increasing breadth of activity.

- Most critically of course, our submariners are deployed 24/7, 365 days a year, on our continuous at sea deterrent – silently patrolling global waters, the effective deterrent our adversaries know is there, somewhere, always ready to defend.

- Protecting the freedom of navigation on which we all depend, wherever it is threatened is at the core of the Royal Navy's work – and HMS Diamond has been demonstrating that at the centre of the UK's critical role in the US-led international coalition to uphold freedom of navigation in the busy shipping lanes of Red Sea and the Gulf of Aden...

- Sharing analysis from the UK Hydrographic Office has allowed US planners to establish the temporary pier needed to deliver aid to Gaza – with RFA Cardigan Bay playing a vital part...

- And our sailors aboard HMS Tamar and HMS Spey in particular are working with countries in the Indo-Pacific, to build and protect sustainable blue economies that are so critical – supported by the UK's £500m Blue Planet Fund...

- As well as supporting small island states respond to shocks – like the crew of HMS Spey volunteering their free time to work alongside Tonga's National Visually Impaired Association, in the wake of a devastating volcanic eruption and tsunami... and I can tell you they have got friends for life on that island. It was really touching to discover the affection with which the work they have just done made a difference.

These are just a few examples of the recent work you have been leading. So I know you all agree that it was great to hear the Prime Minister's announcement on 2.5% of GDP for defence spending, and a first picture from the defence Secretary yesterday on what this might look like for the Royal Navy.

As the Foreign Secretary said last week, this is a world more dangerous, more volatile, more confrontational, than most of us have ever known. We need to face up to that fact and act accordingly. Not in a year or two. Not in a few months. But now.

What is going to be vital is that the new integrated procurement model which we have set out, must turn government's relationship with industry into a true strategic partnership – the 2.5% commitment will allow long term planning on shipbuilding, for instance, which will be vital to our ability to get the next generation of ships and submarines into service as quickly as possible. Those platforms will carry the innovative inventions which give us that critical military advantage. So we must now make industry the sixth domain of our defences.

Whilst government, or rather the taxpayer – those ladies keep telling me that when I do the dog walking – it's their money not ours. They are funding the Royal Navy, it is our defence and security industries which deliver the infrastructure, skilled workforce and platforms, weapons and kit for that your sailors need to deploy.

This First Sea Lord's Conference takes place as our world becomes increasingly dangerous, unstable and unpredictable. We must not divorce foreign and economic policy from domestic politics. All over the western world, we see the rise of political movements that want us to pull up the drawbridge, claiming that we will be better off if we focus purely on domestic concerns. But this is the wrong answer. Because what happens abroad matters directly to our citizens.

Our approach must not be to ignore the rise of these movements. It must be to deal with what has caused them to grow, so we can engage with the world and therefore safeguard our national interests. And so it is more important than ever that our understanding of the strategic importance of the maritime - from the margins of the conversation into the heart of foreign policy – is centre stage.

The impacts of

- Instability ... in the Middle East;
- Aggression... in the Black Sea;
- Military and economic coercion in the South China Sea;

and the double-edged sword of emerging technologies are rippling out across the globe. Households everywhere are feeling the pressure of all this on their budgets. Fuel, food and fertiliser price spikes courtesy of Putin's illegal war have shaken the economies of all, but the poorest have suffered most.

Governments have had to underwrite these cost of living hikes where they can.
So after a long period of - perhaps naive – optimism, people now understand once again why defence needs to be prioritised, and that the Royal Navy has a central role to play.

Credible deterrence across these many unstable theatres requires our Royal Navy, alongside our allies and friends, to be fitter than ever - to sustain free and open navigation routes, protecting undersea energy and cables, and assisting many countries in safeguarding the sovereignty of their EEZs.

We must work with our US allies to take some of the strain in support of their leadership to assure the security of so many, from NATO on their east to Indo-Pacific friends on their west. As I travel across the Indo-Pacific, all my conversations with counterparts have the challenge of maritime security and protection on the agenda.

For the UK, our work across the Indo-Pacific continues to be a priority – as we set out in our integrated review refresh last year – the Euro-Atlantic and Indo-Pacific are indivisible. Together, we are standing up for our shared security, freedom, and prosperity – and there is nothing selfless about wanting to focus on the two thirds of global maritime trade which passes through Indo-Pacific waters.

We are leaning into our role as Dialogue Partners in ASEAN and IORA, as well the Pacific Island Forum. Our bilateral maritime dialogues with Brunei, India, Indonesia, Malaysia, Maldives, Philippines, and Vietnam are going from strength to strength, with Maritime Domain Awareness and then work on how to manage policing these waters once the malign activity is known at the heart of what we are doing– but sadly we know there is great deal more to do.

As the Defence Secretary highlighted, our second Naval Littoral Response Group is hard at work keeping the Indian Ocean safe and open.

The challenge we have set ourselves with the USA to help our Australian counterparts develop a nuclear-powered submarines fleet is going to require an enormous commitment from our British industries – it is they who are building new relationships with Australian companies, universities and state governments, to prepare for the SSN-AUKUS fleet.

And we must never forget why this was agreed – it is because nuclear-powered submarines can travel greater distances, be undetected for longer, and therefore increase the credible deterrence to those who would wish to disrupt or deny the free flows of trade critical to Australia and all our economic security.

The hard work of getting SSN-AUKUS underway had been kicked off with £4bn of contracts to BAE Systems, Rolls Royce, and Babcock for the first elements of the UK's SSN-AUKUS submarines.

But this is just the tip of the iceberg – not in financial terms, but in the uplift in infrastructure and skills which will be needed to deliver it on time. This truly will need to be a national endeavour across all three nations for us to meet the challenge we have set ourselves.

At its peak AUKUS – Pillar 1 - is expected to support more than 21,000 jobs in the UK and will need Australia to grow a skilled workforce which presently does not exist. So its great to see the Royal Navy welcoming Australian personnel as they begin their specialised training.

Pillar 2 activity is also getting into its stride - we have run a first series of successful AI and autonomous undersea capability trials with our AUKUS family. Later this year we will conduct trilateral maritime autonomy exercises. We are also now considering other countries that

might contribute to AUKUS Pillar 2 projects, with Japan in the first instance.

The AUKUS Industry Forum, Defence Investor Network, and electronic warfare Innovation Challenge, are all now up and running to help improve and strengthen engagement and real understanding between government and industry. I will keep saying it – it is industry that builds the tools our sailors must have to deliver the effect we need.

We must get better at demonstrating that government understands that, if we are to go faster to get ahead of the threats we see growing around us.

As part of that effort, from next year, the UK, US, and Japan will hold regular trilateral military exercises – this will build on the continuous deployment of HMS Spey and HMS Tamar in the Indo-Pacific, and is part of the commitment we have made with the USA in the Atlantic Declaration and Japan in the Hiroshima Accord.

Next year will also bring CSG25 (maybe I can hitch a lift on that first, maybe that's a solution). Our aircraft carrier HMS Prince of Wales will be deployed to the region at the head of a Carrier Strike Group, including a port visit in Japan. And I can tell you there is a long lists of states requesting where else they would like you to visit. Some of the smaller island states may be tricky to park, but we will have to work on that one.

This work is immensely important in and of itself – but it is increasingly important in light of the increasing number of incidents involving unsafe conduct against vessels in the South China Sea over recent months.

That includes actions by Chinese vessels against the Philippines coastguard which have endangered lives, caused damage to civilian vessels, and made headlines around the world – as tensions mount over the Second Thomas Shoal.

We expect all states to uphold UNCLOS – it has a vital role in upholding peace, prosperity, and security, by making sure we all play by a set of rules designed and agreed to guarantee all our futures.

So we will support our partners to shine a light on these actions that heighten tension, risk escalation, and threaten regional peace and stability.

Indeed, from the Caribbean to the Pacific Ocean, the Royal Navy's Maritime Domain Awareness Programme sets the global gold-standard when it comes to building the trust, partnerships, and capabilities we need to plan-ahead and respond to everything from illegal fishing to state threats.

We hope to expand this shared security expertise further, because we all need to look beyond what seems most alarming in a headline – to scan the horizon for what should really be keeping us up at night, so we can get the right pieces into place, across multiple theatres.

And, while it may seem trite to say that 'together, we are stronger' – from NATO to the MDA Five Eyes Partnership Forum, we should recognise that even when trust has been strained, and our resolve tested, we hold firm.

As we continue to work on inter-agency cooperation, on integrated defence and security, and indeed counter-terrorism – let us be clear about what is at stake, right now.

For us Brits, our identity as a maritime nation is a deep and enduring part of our view of ourselves.

Around the globe, others are looking to us to make good on the promise of that legacy for our shared future – by defending the values we hold dear, not just for ourselves but for all whose who long to feel the benefits of freedom and prosperity in their lives as well.

Indeed, they are looking to all of us – as determined adversaries and ruthless opportunists

seek to bludgeon the brave into submission – to support them as they are brave enough to stand up for the future they want to shape for their citizens. So we need to ensure that our Navy and armed forces have what they need to do so.

For all of us right now, we face a defining litmus test in Ukraine.

As we strive to sustain our unwavering support and galvanise others to their cause – it is important that we recognise that it is at sea where the allied contribution is felt most keenly, combined with the Ukrainians' indomitable spirit.

The UK is providing 60 small boats, alongside our mighty Storm Shadows, and uncrewed sea systems, with some £2 billion earmarked to become Ukraine's largest supplier of drones.

Alongside Norway, we are proud to be leading a new Maritime Capability Coalition. Together, we are providing mine detection drones, raiding craft, Sea King helicopters – helping Ukraine build its navy, develop a marine corps, and defend its sovereign waters.

And we know it is making a difference.

Ukraine has struck the Kremlin's Naval HQ in Sevastopol, and sunk or disabled around a third of the Russian Black Sea Fleet – including the notorious Moskva, forcing the rest into hiding. But as you said, probably only for now.

In the first months of 2024, agricultural exports reached the highest level since the war began – getting grain from Ukraine to those who need it most, has been a key British focus, just as we work to disrupt Russia's shadow fleet, and increase the cost of Putin's war machine with the largest ever package of sanctions.

In short, the Ukrainians have the will, they have the skills, and they have proved their effectiveness – if we back them. The UK will commit at least £3 billion a year for military support to Ukraine – building on more than £7bn to date. We welcome the recent release of funding from the US, as well as the EU. But it is up to all of us to make this a priority for as long as it takes for the Ukrainians to prevail.

The reality is that we MUST get on a war footing in order to safeguard peace once again – just as twelve founding NATO nations did 75 years ago, when they gathered in Washington D.C, after conflict had engulfed the globe for the second time in a generation.

We can be proud to be sending some 20,000 UK personnel to the enormous Exercise Steadfast Defender – with our carrier strike group out in full force.

And if all NATO countries were to commit at least 2.5% of their GDP to defence when we all meet in Washington this summer – as we in UK are now committed to – then our collective budget would increase by more than £140 billion.

But it's not just a commitment for meeting a future figure, it's about upping the pace on investing now in our defence industrial partners. Then we really will be changing gear, enabling our defence industries, their innovation and people, to invent, build, weld, innovate to give us the hardware and the software our armed forces need in order to protect more than a billion people across the NATO family and global security – from malign actors who have been investing at an incredible rate, and for too long, we have just been watching.

Ladies and gentlemen - It's not all about NATO, it's not all about maritime capability, and there's only so far money goes.

There is more we can and must do to build more partnerships and achieve greater coordination. As I said last year, gunning for interoperability and interchangeability is a no-brainer.

There is more we can and must do to send the clear, unequivocal, united signal to our adversaries that we will stand up for our values and our freedom – that they will not grind us down, nor will they wear us out, nor divide us.

So we must make good on our word – it will be mission critical to deterrence which is effective in keeping the peace because it is credible, and those who would wish us harm need to know that.

Be it in Ukraine or anywhere else, if we allow our word to be shot down by tyrants and chancers – we send our every adversary the signal that it is open season on all that we hold dear.

And in so doing, we would be gambling every gain hard-won – not only of the rules to which we have all signed up – but of the tacit good faith treaties on which we rely to hold the fragile peace.

We must do all we can to stack the odds in our favour. The future is not guaranteed. So it is up to all of us to write the next chapter together. Governments can and must provide the money and the leadership, but only industry can give us the tools to enable our brave military personnel to deliver that credible deterrence, denial capability or front-line defence should it be necessary. That safe and secure, peaceful and prosperous world we wish for our children doesn't come free.

Thank you.

Panels and sessions

The Royal Navy of the 2020s was conceived at the turn of millennium – 25 years ago. That means the navy of the future will be designed today. That is why, in 2024, the First Sea Lord's Sea Power Conference was organised around the theme of 'Future navy: Maritime in the 2040s'. The world of the future will most likely be very different to the relatively benign world of the late 1990s (albeit transnational crime will continue to be a problem).

The international order is becoming more contested as rivals such as Russia and, particularly, the People's Republic of China build up their fleets and attempt to 'territorialise' parts of the maritime commons. Their naval modernisation programmes mean that the Royal Navy and the navies of allies and partners may not hold the same degree of command of the sea which they have held in recent decades, nor the ability to project force into the littoral or onto land. In addition, critical maritime infrastructure is becoming more important, not least in terms of offshore power generation, energy pipelines, and fibre optic cables, to the extent that its restriction may cause significant economic impact. Environmental security issues, such as melting ice in the Arctic and Antarctic, sea-level rises, storm surges and recurrent floodings, are also causing new dilemmas and issues. Finally, new technologies – from fuel sources and weapons, to autonomy and artificial intelligence – will have a significant impact on the future of maritime power, and Britain may not remain in the lead.

It is this emerging and future maritime environment which informed the First Sea Lord's Sea Power Conference 2024, held on 14th-15th May at Lancaster House. The conference looked to 2040 to anticipate the geopolitical, geoeconomic and technological changes which will afflict naval power, while focusing on how the Royal Navy, as well as allied and partner navies, can respond. In short, it attempted to create the foundations of a vision for the Royal Navy for 2040 – a date which seems distant, but is in fact only 16 years away.

Panel 1: Protecting our economy in the 2020s: Keeping trade routes open and safe

Panel 1, 'Protecting our economy in the 2020s: Keeping trade routes open and safe', focused on the importance of the Royal Navy to Britain's current and future prosperity. It delved into the crucial role sea lines of communication and trade play in the United Kingdom's (UK) economic future, and why a navy is needed to keep them secure. It also discussed how navies of the 2020s will be 'software defined and hardware enabled', and how history can inform contemporary naval strategy and the future requirements of the Royal Navy. The panel was chaired by Prof. Alessio Patalano and featured V. Adm. Andrew Burns, Amelia Gould and Dr David Morgan-Owen.

During the Future Maritime Leaders Laboratory, there was a sense of nervousness about the late-2020s and the continued fracturing of the world order. Will economies become more closed and protectionist? Will state-based competition break out in the Indo-Pacific? Will trade routes continue to be tested and come under increased strain, potentially resulting in some being severed? These questions are pertinent to the Royal Navy and the environment it operates in.

The economic context which the Royal Navy operates in is global, and certain conflicts cannot be confined to the geographic region they are in and divorced from their international ramifications. Russia's war against Ukraine, for example, has had global implications which frequently have a maritime element, such as the blocking of access to the Black Sea for Ukrainian grain exports, exports which are frequently destined for less-developed nations. Indeed, the same is true for current instability in the Middle East; before Houthi attacks in the Red Sea began, some 33% of global trade passed through those waters largely uninterrupted.

'Protecting our economy in the 2020s: Keeping trade routes open and safe' | Panel 1
V. Adm. Andrew Burns, Amelia Gould and Dr David Morgan-Owen
Moderated by Prof. Alessio Patalano

British prosperity is nested within this global economic context. 50% of the UK's energy and food is imported by sea daily, a significant sum. Order in the maritime domain, therefore, is fundamental for British prosperity and stability. It is clear how adversaries could utilise the disruption of trade to advance strategic goals which may not be so obvious at first glance. The Royal Navy must be coordinated with all levers of government in defending these crucial sea routes against such threats, and guided by a national strategy which recognises the vulnerability of the British economy in a globalised system. And the crucial question of how to rapidly expand one's maritime forces at the outbreak of war before the period new ships can be built from scratch, whether through significant acts of industrial policy or the better utilisation of existing hulls, is critical.

But it is not all about the platforms themselves. Hulls are no longer the differential factor, and in the next five to ten years the Royal Navy cannot simply rely on new ships coming into service. This decade will be software defined and hardware enabled. Artificial intelligence (AI) will be ubiquitous and transformative, and ships – or drones – defined by the software put on them. Sailors must be trained to fight with the ship, not fight the data. Protecting the economy in the 2020s will require designing platforms and underwriting Britain's maritime power with an ability to adapt as the threat changes.

Panel 2: Protecting our economy in 2040: Securing critical maritime infrastructure

Panel 2, 'Protecting our economy in the 2040: Securing critical maritime infrastructure' investigated how international maritime norms will have changed by the 2040s, and the effect this will have on the critical infrastructure which underwrites global connectivity. It also discussed what Britain can do to react to any potential problems in the future, and how it can get ahead of them before they arise. The Panel was chaired by Suzanne Raine and featured Adm. Nicolas Vaujour, Prof. Christian Bueger and Harry Holt.

2040 will be an age of infrastructure, with oceans becoming even more heavily industrialised zones than they are today. The sea and the critical infrastructure it houses will remain key to global conflict, all of which spills over into the sea in one way or another. Competitors will increasingly see value in threatening Britain's critical subsea infrastructure in order to place pressure on politicians, the economy and therefore the public. The Royal Navy is thus beginning a new cycle regarding its *raison d'etre*, which is coming back to its roots in protecting trade. But protecting trade in 2040 will not just be about ensuring freedom of navigation; it will be centred around the UK's ability to care for, protect, and repair critical undersea infrastructure.

In doing so, there have traditionally been three crucial elements: the number of assets the Royal Navy has, the technology it possesses, and the skill of its crew. A fourth must be added

'Protecting our economy in 2040: Securing critical maritime infrastructure' | Panel 2
Adm. Nicolas Vaujour, Prof. Christian Bueger and Harry Holt
Moderated by Suzanne Raine

today – the strength and breadth of its partnerships. The majority of maritime infrastructure is controlled or operated by third parties and private entities. The protection and regulation of these private networks is therefore very complicated, and it is clear that additional coordination is needed to secure them properly. Increased coordination with partners gives the Royal Navy access to almost everywhere in the world to tackle threats when they arise, and allows its impact to be greater than the sum of its parts.

Being able to adequately protect and repair this infrastructure will also require more thinking about the interdependencies which underline them. Looking at the surface alone will no longer be appropriate. In fact, this is even true in 2024; the sinking of the Rubymar in the Red Sea in 2024 damaged four undersea data cables as the hull drifted along the sea bed.

Furthermore, threats to subsea infrastructure are not just state-based and strictly about the hardware itself. Climate change, for example, poses one of the greatest challenges, and it is only through close and coordinated action with allies and partners that it can be addressed appropriately and sustainably. Normative threats also abound, such as the challenge mounted against the United Nations Convention on the Law of the Sea from nations such as the People's Republic of China (PRC) and Russia as they offer an alternative vision for international order and engage in 'lawfare'. These challenges will only increase as the world continues to destabilise out into the 2040s.

Panel 3: Maritime operations by the 2040s: Shape, deter, defend

Panel 3, 'Maritime operations by the 2040s: Shape, deter, defend' looked ahead to the future shape of naval operations across the 2020s and 2030s, and how that will impact naval operations in the 2040s. As well as the factors influencing the operating environment, the panel also focused on the specific challenges to that environment, what informs them, and how the UK should respond. The Panel was chaired by Dr Emma Salisbury and featured Prof. James Bergeron, Maj. Gen. Rich Cantrill, and V. Adm (rtd.) Tom Rowden.

The pace at which the operating environment changes is rapid. 2040 is only 16 years away. 16 years ago, in 2008, concerns centred around international piracy, non-state actors, and terrorism. Although such concerns still exist today, the main focus of Western powers in 2024 is state-based competition, and in the Euro-Atlantic specifically, resisting and defeating what is outright imperial conquest conducted by Russia.

Deep strategic rethinks do take years. The North Atlantic Treaty Organisation (NATO) has been undertaking such a rethink since 2014 when Russia began its invasion of Ukraine, and the alliance has made significant progress in how it reacts to and tackles the challenges of the operating environment.

'Maritime operations by the 2040s: Shape, deter, defend' | Panel 3
Prof. James Bergeron, Maj. Gen. Rich Cantrill, and V. Adm (rtd.) Tom Rowden
Moderated by Dr Emma Salisbury

What, though, will be the main challenges of the operating environment in the 2040s?

Emerging disruptive technologies will no longer be emerging, and the challenges they pose no longer confined to the abstract, but influencing the daily lives of British citizens and the operations of the Royal Navy. Quantum computing, for example, may have broken the 100-qubit range, making encryption and decryption extremely difficult. AI will further blur the boundaries between fact and fiction. Geopolitically, the PRC will be smaller, the United States (US) larger, and the world a lot 'hotter', or put simply, unstable.

The mentality and orientation of the youth in the 2040s must be considered. The US-led 'War on Terror' will be learnt about in the history books, as will the benign strategic environment which directly followed the Cold War. Ukraine will only be known as a state resisting Russian occupation and violence, and the PRC a power seeking to extend its malign influence in order to cultivate an international order which is more conducive to its illiberal, undemocratic interests. The friction between the fast pace of technological development and the more sluggish pace of the construction of new platforms will continue to be a conundrum plaguing Western militaries, and will require industry and the armed forces to be malleable to swift change. These facts need to be factored into strategic thinking today, so that their ramifications can be fully understood and capitalised on – or countered – in the 2040s.

Western militaries will also have to enhance their ability to project power and operate in a more forward-leaning environment. The lethality underwriting systems and capabilities will have greater range, and more autonomy in making its own decisions. Access to waterways and bases will also come under increased strain. The Royal Navy will, therefore, have to disperse itself more and operate at greater range from the adversary, yet remain decisive when under attack. Mission commanders and senior leaders who are away from the front lines of confrontation must subsequently be empowered, so that they can make the correct decisions with imperfect information.

In all this, the violent character of warfare will not change. Indeed, in the 2040s, it may even become more so and the world continues to descend into instability.

Panel 4: Stronger together: A 2040 vision for the Royal Navy and partners

Panel 4, 'Stronger together: A 2040 vision for the Royal Navy and partners', centred around with who, and where, the Royal Navy will need to increase collaboration out into the 2040s. Specifically, it touched on where there will be increased demand for maritime security, and how the Royal Navy in tandem with its allies and partners can apportion their resources so as to secure strategic advantage in this context. The Panel was chaired by Ashlee Godwin and featured Adm. James Kilby, V. Adm. Martin Connell and AVM Fin Monahan.

'Stronger together: A 2040 vision for the Royal Navy and partners' | Panel 4
Adm. James Kilby, V. Adm. Martin Connell and AVM Fin Monahan
Moderated by Ashlee Godwin

Specifically, it touched on where there will be increased demand for maritime security, and how the Royal Navy in tandem with its allies and partners can apportion their resources so as to secure strategic advantage in this context. The Panel was chaired by Ashlee Godwin and featured Adm. James Kilby, V. Adm. Martin Connell and AVM Fin Monahan.

Competition does not stop once the threshold of warfare has been breached. The British Armed Forces, as well as those of the UK's allies and partners around the globe, need to ensure that they remain robust through the continuum of competition. This requires closer collaboration regarding who is going to deploy what resources and to where, as well as honest assessments of where British power, and that of its allies and partners, can be maximised.

Why is this so important? Because the world is going to become increasingly crowded and contested out into the 2040s. The Royal Navy must become more cutthroat in dividing up its forces, and should be clear with allies and partners about where it wants to fight, and who can supplement this effort.

Another factor influencing the need for greater collaboration between Britain and its allies and partners is increasing demand for maritime security, something which will only accelerate between now and 2040. We are seeing entire new maritime sections opening up, such as in the Arctic, as well as increasing maritime instability as a result of climate change, such as increased pressure of fishing stocks in the Indo-Pacific which is leading to a proliferation of illegal, unreported and unregulated fishing.

All of these factors will influence the way in which the Royal Navy deters adversaries. Indeed, there is a need for deterrence to become more integrated across platforms, countries, and levels of political hierarchy. Populations also need to become more involved, and understand why they need to support their armed forces. The Carrier Strike Group (CSG) deployment of 2021 was a remarkable success, and demonstrated the ability of the Royal Navy and allies navies to operate together seamlessly. CSG25 provides an opportunity to deepen these bonds, and for populations to better see and understand the application of and need for naval power.

Partnerships and alliances are broader than interoperability. Indeed, key to a seamless operating environment with allies and partners will be the breaking down of unnecessary barriers. Exchanging blood, for example, is currently unavailable to do between the American and British navies, an impediment to fighting and operating. Collaboration across the industrial base is also important. AUKUS acts as a shining example of how all of these elements can be integrated, and relationships deepened to the level required for increasing geopolitical instability.

'The national enterprise in 2040: The maritime contribution' | Panel 5
Dr Robert Johnson, R. Adm. James Parkin, Geoff Searle and Andrew Thomis
Moderated by Viktorija Starych-Samuoliene

Panel 5: The national enterprise in 2040: The maritime contribution

Panel 5, 'The national enterprise in 2040: The maritime contribution', explored the link between national enterprise and the maritime domain. Specifically, how cooperation can be optimised between the branches of the armed forces, industry, government and academia, and how Britain can create a mutually reinforcing vision which all stakeholders can support and, most importantly, enact. The Panel was chaired by Viktorija Starych-Samuoliene and featured Dr Robert Johnson, R. Adm. James Parkin, Geoff Searle and Andrew Thomis.

The connection between British prosperity, industry and the maritime domain has been a theme throughout history. The Royal Navy was arguably the stimulus for the industrial revolution, with the sharp increase in ropes, canons and sails which accompanied the force's expansion. That connection between the national enterprise and the Royal Navy needs to be reestablished; success will be found in doing things in tandem, rather than going at it alone.

And that connection is being reestablished, something which is underwritten by a few simple yet astonishing facts. 90% of the UK's trade by value comes through British ports, and 98% of the City of London's financial transactions rely on undersea cables. These transactions are to the tune of £3 billion pounds per day, leaving London as the largest financial centre in the world by some margin. And it is the Navy which protects these cables.

RFA Proteus stands as a good example of the reinvigoration of the relationship between industry and the Royal Navy. It is also a demonstration of how the role of the Royal Navy in securing Britain is not only shifting in consciousness, but also relevance. This is aided by the fact that there is also a palpable sense now – across government, industry and the armed forces – that we are in a pre-war era, whether we like it or not. But not all share this mindset, and crucial to cementing the Royal Navy as the guarantor of British security and prosperity will be breaking others out of the mindset many have been in since 1990/1991 that we are in a strategic environment which does not require the application of hard power and competing with other stats head-on. If we do not successfully challenge this thinking, we will not be able to succeed strategically. This is a national effort, and key to how we develop and maintain strategic advantage.

For those who are aware of the strategic environment and the importance of greater cohesion between the armed forces, industry, government and academia, now is the time to accelerate action and implementation. In fact, given the rising relevance of naval operations, and the naval character of many of currently ongoing conflicts or those which are potentially emerging, now is the time to make a case for investment in the Royal Navy not at the expense of other elements of the armed forces, but in its own right.

'Future sailor 2040: Developing the skills of the future' | Panel 6
Baroness Anderson of Stoke-on-Trent, Chris Keenan, Nynne Scheuer and R. Adm. Jude Terry
Moderated by Dr Kevin Rowlands

Panel 6: Future sailor 2040: Developing the skills of the future

Panel 6, 'Future sailor 2040: Developing the skills of the future', probed how automation and innovation might affect the recruitment requirements of the Royal Navy, now and in the future. A focus of the panel was on what future resources are needed to ensure that the Royal Navy continues to have the people it needs, as well as how industry and the armed forces more broadly can get the most out of those who serve. The Panel was chaired by Dr Kevin Rowlands and featured Baroness Anderson of Stoke-on-Trent, Chris Keenan, Nynne Scheuer and R. Adm. Jude Terry.

The Royal Navy of today grounds itself in its people, and this fact will not change in the years out to 2040. As a result of the effects of artificial intelligence and new technological developments more broadly, the Royal Navy will need to build a solid foundation around its personnel, and ensure that they remain of the highest quality, and importantly, are trusted.

It is true that emerging disrupting technologies will see the future warship require less people to operate it. But this, if anything, raises the importance of those people who are wanting to join the Royal Navy; as their numbers dwindle, their status within the force increases as their workload becomes more crucial to the navy's daily operations. You cannot project power at sea without the people operating the ships and setting the strategy.

The Royal Navy, however, needs to do better in convincing the people of the UK that they need a navy. There are exciting careers to be had with the Royal Navy, and real stories of such careers need to be told with greater alacrity and frequency; all the fun bits, as well as all the hard work. And these stories should not just be about the service specifically, but the environment one will get to work in, which is not just about peace or war, the sun or rain, but about the culture which they will experience, and connection they will gain to the maritime domain. The sense and worth which mariners feel needs to be conveyed to the British public articulately.

The Royal Navy also needs to be more transparent about the opportunities for 'zig-zag careers', and encourage people to gain experience in the navy then look at a career in industry, or vice-versa. Society and specialisations are changing, and the navy needs to be ready to adapt to such changes if it is going to continue being an appealing career path.

In fact, looking to 2040, it is clear there is an opportunity in people. AUKUS serves as a good example, and should act as a template in how we expand and embed naval partnerships which centre around people; this element of AUKUS is actually focused on how to make sure skills

'The Atlantic-Pacific: The maritime operating environment of the 2040s' | Panel 7
Adm. Ryō Sakai, The Rt. Hon. Anne-Marie Trevelyan, Dr Una Aleksandra Bērziņa-Čerenkova, Dr Balkan Devlen and Charles Parton OBE
Moderated by James Rogers

are spread across all nations. Indeed, in ensuring the Royal Navy has the people it requires out to 2040, recruitment and retention issues will be on par with those around upskilling.

Panel 7: The Atlantic-Pacific: The maritime operating environment of the 2040s

Panel 7, 'The Atlantic-Pacific: The maritime operating environment of the 2040s', explored the geostrategic importance and interconnectedness of the Euro-Atlantic and Indo-Pacific regions and the evolution of the operating environment into the 2040s. The discussion focused on how adversaries will try to exploit the maritime theatre to their advantage and the role that Britain and minilateral groupings, such as the Joint Expeditionary Force will play in the Atlantic-Pacific. The Panel was chaired by James Rogers and featured adm. Ryō Sakai, The Rt. Hon. Anne-Marie Trevelyan, Dr Una Aleksandra Bērziņa-Čerenkova, Dr Balkan Devlen and Charles Parton OBE.

We are living in a maritime century, with the vast majority of the world's population living in littoral regions, while the resources that drive the modern world, including food, energy and material goods travel almost exclusively along the major shipping routes criss-crossing the world's oceans.

In particular, the Euro-Atlantic and the Indo-Pacific are becoming increasingly interconnected, but are also becoming more competitive due to the PRC and Russia gaining strength and increasingly working together. In recent years, the PRC has become active in global waters, including taking part in a joint naval exercise with Russia in the Baltic Sea in 2017. Meanwhile Russia has been expanding its military infrastructure in the Arctic. As a result of this changing geopolitical and maritime environment, global prosperity and the rules based order are coming under threat. It is therefore unsurprising that the Euro-Atlantic and the Indo-Pacific are increasingly seen to be merging into a single strategic theatre, with the UK's Integrated Review Refresh of 2023 embracing the idea of Atlantic-Pacific partnerships.

The situation is set to evolve into the 2040s, as climate change opens up the Arctic Sea, while new technologies will provide various actors access to affordable and highly capable weapons, such as unmanned vehicles. Both of which could exacerbate maritime security and endanger freedom of navigation in the Atlantic-Pacific.

It is clear that no country can face these challenges alone and there is no indication that the revisionist powers' maritime strategy will become less combative in the future. Therefore, countries which believe in free and open oceans must work together to oppose the rising

threat. Bi-lateral and minilateral partnerships between Atlantic-Pacific countries, such as the Hiroshima Accord and the Joint Expeditionary Force respectively, will enhance Britain and its allies' resilience, whilst strengthening the rules based order. It is down to free and open countries, especially those with a naval heritage to ensure that the Euro-Atlantic and Indo-Pacific remain free and open into the 2040s.

Future Maritime Leaders' Laboratory

Location and participants: The Future Maritime Leaders' Laboratory (FMLL) took place in Bush House, King's College London. The event included 60 next generation maritime leaders, drawing from a broad network of academics and practitioners, and other stakeholder communities, to ensure diversity of thought across a broad range of next generation maritime leaders.

Objectives: The FMLL had three objectives: first, to foster strategic fluency by interrogating the policy implications of choices made in the present to meet the challenges of tomorrow; second, to develop a shared cultural competency within a wider early career national security community; and third, to nurture the development of a close-knit network of young professionals within the UK and Europe, working on naval and maritime affairs.

Structure: The FMLL was co-hosted by the Centre for Grand Strategy at King's College London and the Council on Geostrategy. The FMLL was designed as a policy simulation reflecting the complex nature of international politics, with the aim to provide insight into the processes of policy-making and decision-taking, whilst testing crisis management and strategic thinking skills. The deliberations that emerged from the FMLL informed a short briefing that was presented to the moderators of the panels at the First Sea Lord's Sea Power Conference, to help guide some of the discussions.

Review of discussions: Across the groups, there was significant agreement over the idea that the 2030s are likely to see a greater risk for sustained conflict with Ukraine remaining a major determinant of European security, the Middle East featuring unstable and unresolved issues in Gaza, and a potentially nuclear armed Iran. Participants disagreed as to whether current levels of tensions in the Indo-Pacific between the United States and People's Republic of China would lead to a higher risk of conflict, or reduced the United States' influence on regional politics and security.

The groups also all agreed that climate change will have a significant impact on how operations will be conducted, as well as on how the requirements for interventions in case of disasters are likely to increase.

Groups tended also to give value to a military posture that put a premium on the ability to contribute asymmetrically to the management of security issues, with specific emphasis on

working closer with partners and allies, within structures such as NATO, but also developing tailored arrangements to be able to make the most of British capabilities and resources.

Groups tended to agree that NATO will continue to be a bedrock of British security, but that collaborative technology agreements such as AUKUS and GCAP will be important in the development of future capabilities. Some participants felt strongly about the frameworks already available to the UK, for example the Five Power Defence Arrangements, as well as other specific frameworks within Europe such as the Joint Expeditionary Force, and the need for these frameworks to take a more central role greater centrality in Britain's approach to crisis management and regional structural resilience.

The groups did not agree on the extent to which technology will enable the enlargement of the fleet of the future, but they did agree that in order to deliver a more effective fleet, greater synergy between the public and private sectors will be essential. Resilient supply chains and trust in partners nationally and internationally are all critical components in the extent to which future fleets will be able to operate confidently. Participants also agreed that any reflection on the role of technology raises an equally important question on skills and personnel. Ensuring higher levels of skilled forces is going to be an ever-greater priority, and an area for technology to deliver on, in order to deliver the effective operation of the fleet.

Lessons learnt and feedback: Feedback from participants was overwhelmingly positive. Several participants shared their thoughts on social media platforms such as LinkedIn or X (formerly known as Twitter).

Overall, feedback was enthusiastic, with participants who also attended the last edition noting efforts in providing greater focus and analytical engagement opportunities to participants. Participants were very positive about the format, though many lamented that it would have been great to have more time to debate the scenarios.

The policy simulation approach in particular has been praised for promoting debates and understanding, in comparison to narrower policy simulations which dampen the conversation and do not present the opportunity to discuss assumptions. Students and professionals alike enjoyed the diverse background of participants which made conversations richer and more engaging.

RFA Proteus

RFA Proteus was docked on the River Thames, alongside HMS Belfast, for London Sea Power Week. RFA Proteus is the first of a new generation of survey and surveillance ships harnessing leading-edge technology and dedicated to monitoring underwater in areas of UK sovereign interest. With a crew of around 85 Royal Fleet Auxiliary and Royal Navy personnel, RFA Proteus acts as the launchpad for remotely-operated vehicles and a suite of specialist capabilities similar to those found in the oil and gas industries monitoring waters vital to Britain's interests.

University engagement

As part of the First Sea Lord's Sea Power Conference 2024, the Council on Geostrategy and the Royal Navy are hosting three additional events at universities across the country. Two of these events were held in Spring 2024, ahead of the conference, and the final event will be held at City College, Glasgow, in Autumn 2024.

UNIVERSITY OF CAMBRIDGE

30th April 2024

Lancaster University

8th May 2024

CITY OF GLASGOW COLLEGE

Autumn 2024

Sea change in the Baltic? Protecting trade, energy security and supply after Russia's invasion of Ukraine

On the 30th April 2024, the Council on Geostrategy in partnership with the Centre for Geopolitics at the University of Cambridge held the first side event of the First Sea Lord's Sea Power conference 2024. Below are the key discussion points and takeaways from the event, as well as the key questions that were asked by audience members.

Since February 2022, the approach of Baltic nations to their energy security has changed dramatically. Energy policy has become securitised, with it being clear in Baltic capitals that it was Russia's aggression which initiated this stark reversal in government policy. Baltic energy policy has also seen an unprecedented convergence.

But shifting energy policy is not like flicking a switch, and with it comes a whole new set of security concerns. A phase out of Russian gas, for example, has increased the Baltic's reliance on liquid natural gas (LNG); the same security questions around infrastructure and its security do not disappear in this instance, they are simply remodelled.

Russia's mask-off moment in Ukraine has also further strained the balance of using military resources to secure energy infrastructure – you cannot have a soldier on every inch of pipeline, and the costs associated with repairing infrastructure is extremely high. In fact, repair capacity has today become as important as the infrastructure and policy itself. This fact is even more pertinent when considering the uptick in cyber attacks to Baltic energy infrastructure since Russia's invasion of Ukraine. Repairing and protecting critical energy infrastructure is not just about the physical parts, but also the systems embedded within them and the software used to protect them.

The way forward for Baltic energy security is to bake resilience into the system. This is of course about resilience to cyber and physical attacks. But also about societal resilience, and increasing political messaging in Baltic nations over-reliant on energy imports in general. This is a job that could fall to politicians when addressing the nation/setting policies, but also in education; Baltic children should be better educated on the importance of the role critical energy infrastructure plays in their lives.

As the Baltic nations change their approach to Russia and their energy security, the Royal Navy should look to respond in tandem. Indeed, its role as a guarantor of Euro-Atlantic security has never been more apparent, particularly through British-led initiatives that directly influence and bolster Baltic security such as the Joint Expeditionary Force.

Key questions:

- Whose job is it to increase national awareness about the importance of critical energy infrastructure? Politicians, private sector, both?
  - The answer was that it is more a job for politicians, but also one that should be encouraged by the private sector. The key, though, is education, and it is here that the majority of the effort should be spent

- What tangible action can be taken to protect critical energy infrastructure, particularly that is in remote or inaccessible locations?
  - The answer was that it is important to understand that breakages can happen naturally, and that it is not always malign action. There are very few options when it comes to physically securing this infrastructure, however, it can be protected effectively if resilience is built into it. Emerging technologies such as artificial intelligence will help in this effort, particularly when it comes to monitoring the infrastructure.

Cyber capabilities in the maritime domain and their importance for the UK

On the 8th May 2024, the Council on Geostrategy in partnership with Lancaster University held the second side event of the First Sea Lord's Sea Power conference 2024. Below are the key discussion points and takeaways from the event, as well as the key questions that were asked by audience members.

The stability of the global maritime order is increasingly threatened by Britain's geopolitical competitors, which contest the leadership of free and open nations at sea. Any disruption to freedom of navigation will impact Britain's economic security whilst also negating the ability of free and open nations to project maritime power. This 'strategic acceleration' is reinforced by rapid technological changes in the field of artificial intelligence, machine learning, cyber and automation. Which in combination with missiles and drones is challenging the global maritime order.

The UK is well placed to address these challenges and exercise power in, and from, the maritime domain. Yet, resources are scarce and there are increasing demands on the Royal Navy. Decisions regarding investments that will determine our capabilities in the coming decades shall be made now.

Key points:

- **A changing operating and threat environment**: We are entering an era in which surface vessels are increasingly vulnerable to land-based missiles and drones. At the same time, the range and scale of threats in the maritime domain is growing, from illegal fishing to attacks on critical infrastructure. Additionally, the emergence of new and disruptive technologies allow adversaries to exploit the grey zone to disrupt maritime trade and security.

- **From information dependence to information resilience and denial**: Networked platforms and systems are driving increased reliance on real-time information, exposing vulnerabilities that can be exploited. As a result, the Royal Navy must learn to operate in information denied environments with limited access to external data. However, these are challenges our adversaries and competitors also face – the Royal Navy and navies of allies and partners should look to exploit information denial strategies in a responsible, ethical and calibrated way.

- **Challenges for procurement:** New and emerging technologies could increase the cost of maintaining sea control. To counter the challenges cyber presents to the maritime domain, the Royal Navy and its allies and partners ought to invest in affordable mass such as autonomous vessels and drones. However, there are trade-offs between the rapid adoption of new technologies and the procurement of reliable equipment. Software can be used to bridge the gap by providing rapid capability improvements due to the speed at which it can be implemented and updated. Additionally, the Royal Navy needs to be prepared to mitigate the security risks associated with the introduction of artificial intelligence which can negatively impact decision making.

First Sea Lord's Essay Competition 2024

The Council on Geostrategy was delighted to hold the First Sea Lord's Essay Competition 2024 for the second year in a row. You can read the winning essays on pages 31-36.

To be considered for the prizes, entrants were tasked with writing a 1,250 word essay answering one of the following questions:

1. How should the UK apportion its naval resources across the globe?
2. What lessons are there from naval operations in the Black Sea and/or Red Sea since February 2022 for the Royal Navy?
3. How will the proliferation of autonomous, uncrewed and minimally crewed systems change naval warfare by 2040?

What lessons are there from naval operations in the Black Sea and/or Red Sea since February 2022 for the Royal Navy?

By Nicholas Fryer | Gold Prize

Of the forces in Russia's full-scale invasion of Ukraine war, the Russian Navy is the most similar to the Royal Navy in materiel and reach. This essay outlines the lessons the Royal Navy should learn from naval operations in the Black Sea in order to be properly prepared for future conflict; it does so through the means of an imagined intercepted communication from the Commander of the Black Sea Fleet:

To: Black Sea Fleet Commander Desig.

RUSSIAN BLACK SEA FLEET HANDOVER NOTES: 11 LESSONS

> *Never despise your enemy…Try to find out about his weapons and means, how he uses them and fights. Research into his strengths and weaknesses.*[1]

If you are reading this, then you have been appointed Commander of the Black Sea Fleet in my place. These 11 lessons aim to help you avoid my fate by identifying the key strategic, operational and tactical lessons that the Black Sea Fleet has learnt at great cost since the inception of the Special Military Operation.

Ultimately, this may be the start of a revolution in conflict at sea, as more and more actors can put conventional navies at greater risk, even as enduring principles of sea power remain. This conflict offers lessons not just for our navy, but for all navies everywhere;[2] NATO forces, such as the Royal Navy, may, if they pay sufficient attention, learn these lessons in due course.

Strategic:

1) **The principles of maritime military power still apply**, even if the Ukrainian Navy claims to be 'the driver of a new type of naval warfare'.[3] Although the fleet has not exerted control over the western Black Sea since the end of the Black Sea Grain Initiative, this does not mean the recognised principles of sea power are moribund. Sea control is rarely complete; isolated, asymmetric attacks by an inferior adversary like the Ukrainian Navy have always been envisaged (by Julien Corbett and Alfred Mahan).[4] The sinking of the *Moskva* is the most striking example of this.[5] Sea denial is effectively guerilla warfare at sea, and the Ukrainian Navy excels at it.[6]

2) **Even minor maritime states or non-state actors can pose an asymmetric threat to conventional navies, as there may be significant intelligence and equipment support from other states**. Ukraine benefits from considerable support from North Atlantic Treaty Organisation (NATO) nations, in weaponry (e.g., the United Kingdom (UK) gifting of Storm Shadow missiles),[7] training or intelligence support (e.g., in the sinking of the *Moskva*).[8] Short of significant changes, this trend will continue and exists elsewhere, as shown by Iranian support for a non-state actor such as the Houthis.[9] Owing to advanced anti-ship weaponry, even actors with limited conventional maritime assets can pose serious risk to high-end navies such as our own: the barriers to entry are lower than before.[10]

3) **In modern maritime warfare mass has value.**[11] The cost of the Ukrainian asymmetric advantage has been the sinking of approximately one third of the Black Sea Fleet.[12] It is only by having a significant number of hulls from the start that the situation has not become even worse for the Russian Navy, as such losses pose significant challenges in terms of replacing lost vessels, owing to the time it takes to build new warships and the logistical difficulties of getting them into theatre.

4) **The navy must be prepared in terms of training and materiel for sustained and prolonged, high intensity war**, over and above tasking such as maritime constabulary or disaster relief operations, which preoccupy some other navies around the world.[13] This has been recognised for many years in the navy, but it also requires recognition that in light of the extremely high expenditure of missile stocks and other materiel, the ability to fight high intensity conflict demands national resilience and having the right military industrial structures in place to ensure continued supply of weaponry.[14] No matter how technologically advanced the weaponry is, logistics remains a principle of war.

5) **The value of land-attack missile-capable platforms for exerting power from the sea remains**

self-evident.[15] *Kalibr* strikes against Ukrainian targets, at considerable range, pose a potent threat.[16] Despite its losses, the fleet still exerts sea power through the extensive missile strikes launched from surface and sub-surface platforms since February 2022, which amount to around 20% of missile strikes into Ukraine.[17] It must be expected that NATO forces will see this utility and close the capability gap, for example by forces like the Royal Navy making surface platforms cruise missile-capable or investing even more in submarine-launched missiles.

Operational:

6) **Owing to modern missile and Unmanned Surface Vessels (USV) technology, conventional navies must now operate at considerably greater distance from shore.** The impact of asymmetric missiles and USVs, particularly their range and lethality, is that Ukraine can challenge sea control within a larger anti-area, anti-access (A2/AD) denial bubble. After all, the range of a Storm Shadow is 300 kilometres, while Ukraine has launched a successful USV strike against a ship in Novorossiysk, over 580 kilometres from Odessa.[18] As a result of the range and lethality of these weapons, the fleet has been largely pushed from Sevastopol and now primarily operates from Novorossiysk.[19] This is the 21st century iteration of the principle that ships are no match for land-based defences;[20] or as Horatio Nelson put it, 'a ship's a fool to fight a fort'.[21]

7) **Modern anti-ship weaponry calls into question the utility of amphibious capabilities.** Although the fleet had early success with amphibious operations in the conflict, by March 2022 amphibious shipping suffered losses owing to Ukrainian missiles, drones, coastal artillery and mines.[22] There have been extremely limited amphibious operations since. The extended range and lethality of missiles and USVs has severely hampered amphibious manoeuvres. This reinforces Robert Graves' words in 2011 that:

> We have to take a hard look at where it would be necessary or sensible to launch another amphibious landing again – especially as advances in anti-ship systems keep pushing the potential launch point further out from shore'.[23]

8) **The importance of retaining effective Mine Clearance capability** is something foreign navies are paying attention to,[24] owing to the proliferation of mines in the conflict.

Tactical:

The root of the strategic and operational challenges lies in the tactical disadvantage the Black Sea Fleet has faced with Ukrainian missiles and USVs:

9) **Effective anti-air platforms which can intercept incoming missiles and unmanned aerial vehicles are essential** for effectively countering strikes against vessels. Capabilities like the Royal Navy's Type 45 class destroyer have proven their efficacy in the Red Sea and are a capability which should be emulated; doing this may remove the Ukrainian asymmetric advantage in this area.[25]

10) **Effective means for countering USVs must be developed, and USVs adopted**, whether that means countering through effective gunfire, or through other capabilities, as USV defence remains incredibly risky.[26] The difficulty of countering USVs is precisely why the navy needs to adopt them.

11) **Rigour in operational sea training is invaluable for vessel survival**. Reports from the *Moskva* sinking suggested a lack of battle preparedness among the crew.[27] This underscores the value of effective workup training for individual units (a good example is the Royal Navy's Operational Sea Training).

Summary

Despite the technological change which has added lethal USVs to potent sea-denial missile technologies, and which promises a revolution in conflict at sea, the underlying principles of sea power and naval land attack and mine clearance roles persist. Old lessons are being re-learnt about the value of a larger fleet with an appropriate military-industrial complex supporting it. Nevertheless, there is change, as the navy must operate at ever greater distance from the shore to survive and amphibious operations are decreasingly relevant.

Although the conflict offers clear lessons, it does not do so for all domains of naval warfare, with little to offer for carrier operations, general submarine warfare and fleet actions. Nor can it offer lessons for constabulary and anti-piracy operations which dominate naval operations elsewhere. While this conflict in the confined waters of the Black Sea provides lessons in the changing character of naval warfare, it does not and could not offer a complete blueprint for all future conflicts across the full expanses of the seas.

I hope these notes underline the significant lessons the Russian Navy has learned and must continue learning in future. Удачи! Good luck!

How will the proliferation of autonomous, uncrewed and minimally crewed systems change naval warfare by 2040?

By Karen Coutts | Silver Prize

The year is now 2040. To the casual observer in 2024, the rapid rate of advances in technology and artificial intelligence (AI) coupled with developments emerging from conflicts in the Black and Red seas made it seem probable that today's naval warfare would be conducted almost entirely remotely or even autonomously. That is not, of course, the case – for multiple reasons.

Previous commitments

Free and open countries' conventional ship- and submarine-building plans already stretched well into the 2030s[28] with many vessels still in active service now, even taking into account those donated to friendly nations requiring assistance, and the cancellation of the later parts of some of the planned orders. Stopping those commitments and contracts altogether would have had huge social, political and diplomatic impact, as well as incurring financial liabilities to industry. Attempts to change designs once construction had begun led to significant delays and reputational and financial damage,[29] and were largely discontinued.

Crewing of these new large vessels is more efficient and flexible than in decades gone by, and culture changes have been introduced – specific teams now transfer to and from vessels as required[30] meaning that individual deployments are shorter – but this has had an impact on crew cohesion.[31] Personnel remain divided on whether this has improved the overall experience, delaying a final decision on how far the reduced crewing model should be pursued.

Resourcing constraints

Initial trials of uncrewed and autonomous craft were enthusiastically resourced to demonstrate commitment to innovation and awareness of the revolution in that field, and generated novel commercial processes and collaborations between government, academia and industry.[32] Longer term, though, these developments were not fully leveraged. This is because of existing commitments (as discussed above) and the lack of additional parallel or otherwise prioritised funding streams, coupled with the continuation of the historic risk-averse trend in public spending, all exacerbated by short, inefficient and inflexible funding cycles ill-adapted to resourcing enduring strategy or obtaining best value.[33]

It was clear that any large-scale implementation would require close partner working between nations for economies of scale and interoperability,[34] and to allow early identification and resolution of regulatory and legislative issues.

Alliances

However, as the outcome of the US presidential elections in 2024 had the potential to radically shake up the North Atlantic Treaty Organisation (NATO) and other traditional alliances,[35] while simultaneously there was increasing social and political division within Europe as well as split loyalties over the conflicts in Ukraine and Gaza – and disagreement around whether future defence planning at least in free and open countries should centre more on Russia or the People's Republic of China (PRC)[36] – states were reluctant to rely heavily on traditional partners in future planning until the perceived level of uncertainty reduced. This slowed the pace of collaborative working on future technology projects and hindered progress on required data gathering and analysis, studies, and agreements.

Electronic, security, and operational vulnerabilities

Decisions on what technologies to invest in and develop were complicated by the inherent vulnerability of uncrewed and autonomous vessels to electronic spoofing, jamming, and other cyber attacks,[37] requiring a commensurate level of recruitment and training of additional personnel to counter such interference, which offset some of the efficiencies resulting from reduced crewing in other areas. This also highlighted a risk of working as a larger multinational 'team' on an agreed subset of capabilities – greater security vulnerability since a single leak could compromise a larger percentage of the work. The likelihood of this risk materialising was increased by early attempts to reduce costs by taking on younger staff with a reduced level of military training; while those employed held the appropriate qualifications and security vetting, the shortened duration of training combined with the generational tendency towards social activism, and reduced patriotism[38] and respect for hierarchy,[39][40] had negative and in some cases highly damaging consequences when sensitive details were shared by personnel believing they were acting in the public interest.

Further risks materialised when similar efficiencies were sought in relation to remotely operated vehicles through basing crews in their homeland and having them work shifts as they would for office-based rather than combat roles, then return home each day; the outcome was in line with previous studies of the psychological impact of operating in those circumstances, worsened by the reduced force cohesion resulting from the limited military training these specialist teams received.[41] A further consequence of this was seen as increased refusal to follow orders to strike, or to deliberately miss, compared with earlier units who had received standard training.

Uncertainty around AI

A factor impeding progress on legality and regulation was the use of AI, which while not the topic here cannot be completely decoupled from the question of autonomy. Agreement around compliance with the Law of Armed Conflict[42] – or whether a complete revision of that and other doctrine were required[43] – was not easily reached, particularly as, at least initially, AI decision-making mechanisms were opaque and precluded analysis.[44] There was risk around using proprietary commercial solutions[45] due to questions of liability and the possibility of interference or subterfuge including data poisoning;[46] progress on collaborative military versions was slow (due to reasons outlined above), as well as some national rivalries, security concerns, and occasionally individual states wanting to develop the 'best' solution rather than share breakthroughs.

Learning From Experience (LFE)

Mitigation of the restricting factors mentioned above was hindered by the lack of system(s) to rapidly share lessons learned, and of a culture of seeking out that learning and embedding it into future initiatives.[47] Because military personnel rotate through postings shorter than most change programmes, institutional knowledge was lost; this resulted in time and money wasted researching technology that had already been trialled, delaying overall advances.

Current state

However, much has indeed changed since 2024. The Intelligence, Surveillance, Target Acquisition and Reconnaissance (ISTAR) picture is vastly improved through use of uncrewed and autonomous craft,[48] which can remain in position transmitting data as required for far longer and at far less cost than a crewed capability could,[49] removing the need to deploy trained personnel on dull routine patrols – although this is true for friendly as well as hostile forces, who must now keep pace with each other's developments to avoid the other side gaining the advantage.

Risk to life has been massively reduced by the introduction of autonomous and remotely operated systems for mine detection and disposal.[50] Ships transport remotely operated aircraft into theatre.[51] This prompted a rethink of the delineation between Air and Maritime aviation, subsequently restructured to operate more efficiently through resource sharing.

Autonomous supply ships[52] provided through industry collaboration also free up sailors for skilled duties, making a naval role more appealing and helping alleviate the recruitment and retention issues of the recent past.[53]

On the other hand, the use of swarms of cheap mass-produced 'drones' by state and non-state enemy actors,[54] which have elected not to wait for, or comply with, international agreements and legislation, has created a new and ever more dangerous threat. Ironically, this strengthened the case for retaining 'traditional' gun defences on warships as a cost-effective way of countering drones,[55] but has also accelerated the drive to bring into service new and innovative solutions such as the British DragonFire directed energy weapon (DEW).[56]

Next steps

While current fleets may still centre on large, crewed legacy vessels, the past decade has been one of learning, development, and strategic planning, ready for a future that looks very different. International legislation governing use of autonomy and associated AI is in place,[57] and coherent plans for the next decade have been developed between partner nations. The pitfalls of the past short-term cycles of funding and planning are fully understood, and improved processes are established. Learning and knowledge are recorded consistently and shared appropriately to obtain best value from limited resources. Careful consideration is given to whether large ships and submarines are still required to deliver desired military effect; any vessels built are designed to be interoperable between allied nations, for efficiencies in maintenance and to facilitate shared operation. Moreover with the reduced personal risk and increased consideration of their overall wellbeing,[58] personnel are keen to train and serve in the modernised roles of their navy of the future.

How should the UK apportion its naval resources across the globe?

By Lt. S. R. Hollingsworth | Bronze Prize

Presence Underpins Deterrence: Prioritising the Indo-Pacific

The United Kingdom (UK) should prioritise allocation of naval resources in the Indo-Pacific at the expense of those in European waters. Britain should also acknowledge sustainment of these forces as crucial to generating credible deterrence. Since the discontinuation of the two-power standard by 1918, the UK has prioritised apportioning naval resources to the area of most need.[59] In 1930, this was on Far East stations preparing for a potential conflict with the Imperial Japanese Navy.[60] By 2030 this should be in the Indo-Pacific, preparing for a potential conflict with the People's Liberation Army Navy (PLAN).[61] The traditional adversary, Russia, cannot be ignored, but nor can the qualitative decline of its navy. So outside of non-discretionary commitments in the Euro-Atlantic, the most pressing need for naval resources is in contributing to deterrence alongside allies in the Indo-Pacific.[62] It is therefore prudent for the Royal Navy to be increasing force allocation to the Indo-Pacific now and preparing to conduct a transition to warfighting, should it be directed by the political leadership in future. Judgement then over how to best apportion the PLAN facing element of the fleet and provide for the sustained projection of these forces, is the driving determination before deciding how to allocate the remainder.

The drawing down of British naval resources following the First World War was an economic and political necessity. It was partially derived from negotiations with the other leading naval powers, the United States (US), and Japan.[63] However, the fleet did not recede in entirety to home waters. Of the eight naval stations maintained around the world, the largest force allocation outside Europe was in Asia.[64] Under political direction to cultivate relations with the US, the UK discontinued its bilateral naval alliance with Japan in 1921.[65] Eastern commands were bolstered in anticipation of a Japanese threat.[66] This culminated with the construction of a naval base in Singapore. The Singapore strategy was to be the foremost naval strategy of the inter-war period.[67] It dictated that should the UK be required to confront Japan it would need a forward base from which to project force credibly. This was a prudent and logical plan when devised. However, the re-emergence of European threats forced a reversal of this trend in the late 1930s. The Royal Navy could not risk a fight on two fronts. Then from 1944 this trend reversed again. The battle for the Atlantic was nearing its end, and only a supporting role remained for the Royal Navy in Europe. Eastern commands would see a final wartime reincarnation as the British Pacific Fleet (BPF).[68] The BPF was initially based out of Sydney before logistical realities and an increasingly distant area of operations would force a relocation further north. This force flow, based on prioritisation of threat, demonstrates two crucial factors: firstly, the utility of protean naval forces massing in the theatre of highest demand; secondly, the need to mass those forces within sufficient proximity to enabling sustainment functions to produce a credible effect.

Similarly to Germany in the First World War, Russia is in the process of exhausting itself through a land war in Europe.[69] The Russian Navy faces a future in which an ongoing land war drives strategic thought and consumes vast resources. Already in a poor state, the Russian Navy must now be contemplating a very austere future.[70] Which in parallel to starkly demonstrated failures in training, logistics, doctrine and morale, are crystalised in the sinking of the Moskva, former flag ship of the Black Sea Fleet.[71] However, Russia's relative strength in underwater capabilities means the Royal Navy must anticipate some demand for enduring contributions to a maritime counterbalance. But that does not mean it must choose to measure success against a declining standard, nor that it should apportion the fleet in the same way it historically has. During a speech in 2022, Admiral Sir Ben Key, First Sea Lord and Chief of the Naval Staff, said: 'The risk of focussing solely on Russia is that you miss the long-term strategic challenge posed by [the People's Republic of] China.'[72] The PRC is a revisionist power with hegemonic ambitions, challenging the UK's greatest security partner – which is without the support of European allies – in a region critical to global trade.[73] As a lead service in this potential maritime centred conflict, it behoves the Royal Navy to make the conscious decision to prioritise its contributions to the Indo-Pacific. The Royal Navy should establish the necessary vestiges of power projection and sustainment now, and not rely on an ability to make do later. For the foreseeable future the Royal Navy should embody a mantra of: PRC first, Russia always.

The intent to deploy two strike capable Inspiration-class frigates to the Indo-Pacific by 2030 is a positive development.[74] However, this should only be considered a step towards a forward deployed, warfighting force, centred on a UK Carrier Strike Group (CSG). A rotational CSG, forward deployed to the Indo-Pacific, would underpin a credible contribution to deterrence in a way the current 'pulsing' of

'episodic' CSGs cannot.[75] A sensible aim of this deterrence effect is to force the PRC to consider: the prospect of a sustained multi-year conflict; its perennial 'Malacca dilemma', and; the vulnerability of its maritime communication lines in the Indian Ocean.[76] Critically, this deterrent contributes – in coordination with allies – against the PRC's calculus for minimum-cost quick wins and squeezes the Chinese freedom of action. However, the credibility of this force is reliant on several factors, including the sustainment and persistence of its warfighting effect. The Royal Navy has growing experience in deploying and sustaining a CSG at distance, a task which should be underestimated in complexity or scope.[77] The BPF faced similar logistical challenges in 1945.[78] The lesson being that deploying a CSG is only part of the equation. Sustaining it at distance and making considerations for rearmament and repair is another. Achieving persistence of effect and therefore credible deterrence requires proximate sustainment solutions. In the case of a CSG, this necessitates basing nearer the area of operations. The tyranny of distance remains an impediment.

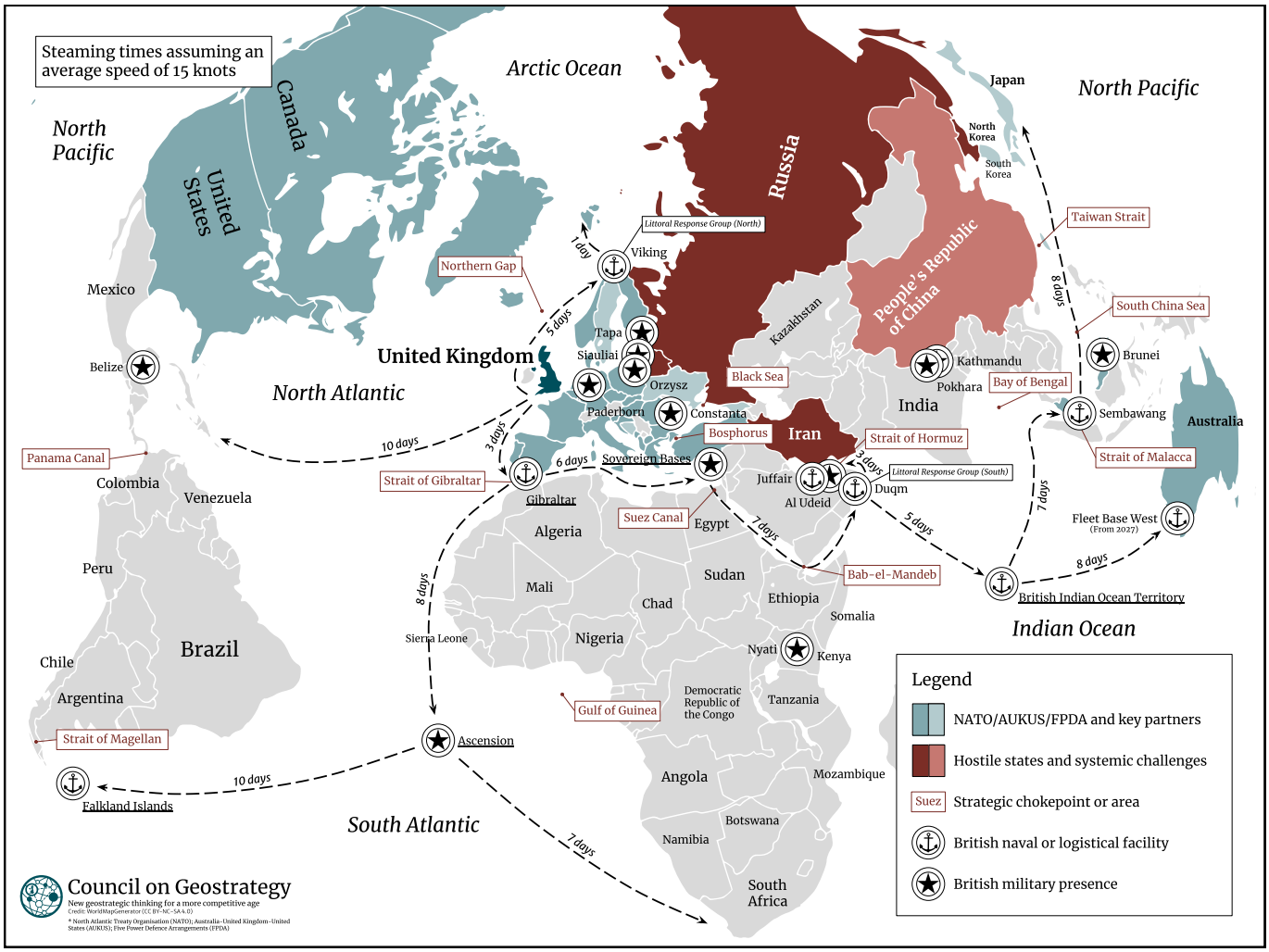
Were the Royal Navy to seek a more permanent footing in the Indo-Pacific, current options are not without complication. Without transiting the South China Sea, many of the nearest conceivable bases to an area of operations like the Philippines sea are 3500-5700 nautical miles distant.[79] Yet some are not distant enough from the potential threat vector to be outside of engagement range, e.g., Duqm.[80] Nor would the host nation necessarily support its use for this purpose. If it is accepted that a forward base is necessary, there is then another predicament: to base yourself inside the engagement bubble or not? Japan is well equipped to defend its airspace, has a reciprocal access agreement with the UK, and is in concordance with the US about the threat.[81] Alternatively, in a repetition of the BPF's experience, Australia may once again hold the most desirable qualities of a regional forward base – Perth being well situated to the Strait of Malacca. AUKUS then is very well timed and its expansion in both scope and membership is welcome news.[82] What remains to be answered is what is the conceivable role for the Royal Navy in this scenario and thus where the new Singapore may be. A distant blockade mission looks very different to a theatre entry mission.

It is not a foregone conclusion that the prime minister of the day would agree to contribute forces in such a scenario. Similarly, it was not a foregone conclusion that the UK and Japan would come into a conflict in the early 20th century. Yet, Britain prudently prepared for that eventuality, prioritising the ability to project forces forward from Singapore to produce credible sustained deterrence. Russia is a wave breaking itself on the rocks of Ukrainian heroism, its fleet languishing in contrast to the Russian land forces. Some Royal Navy capacity to respond to Russia at sea should now be reprioritised against the PRC. The PLAN grows in strength, preparing to face down Britain's greatest ally, in an area of the world critical to global trade. If the Royal Navy is a global navy ready to play its part wherever needed – whether that be deterrence or war – it necessitates a credible warfighting force with proximal sustainment solutions. For without sustainable presence, any notion of credible deterrence is undone.

Maps

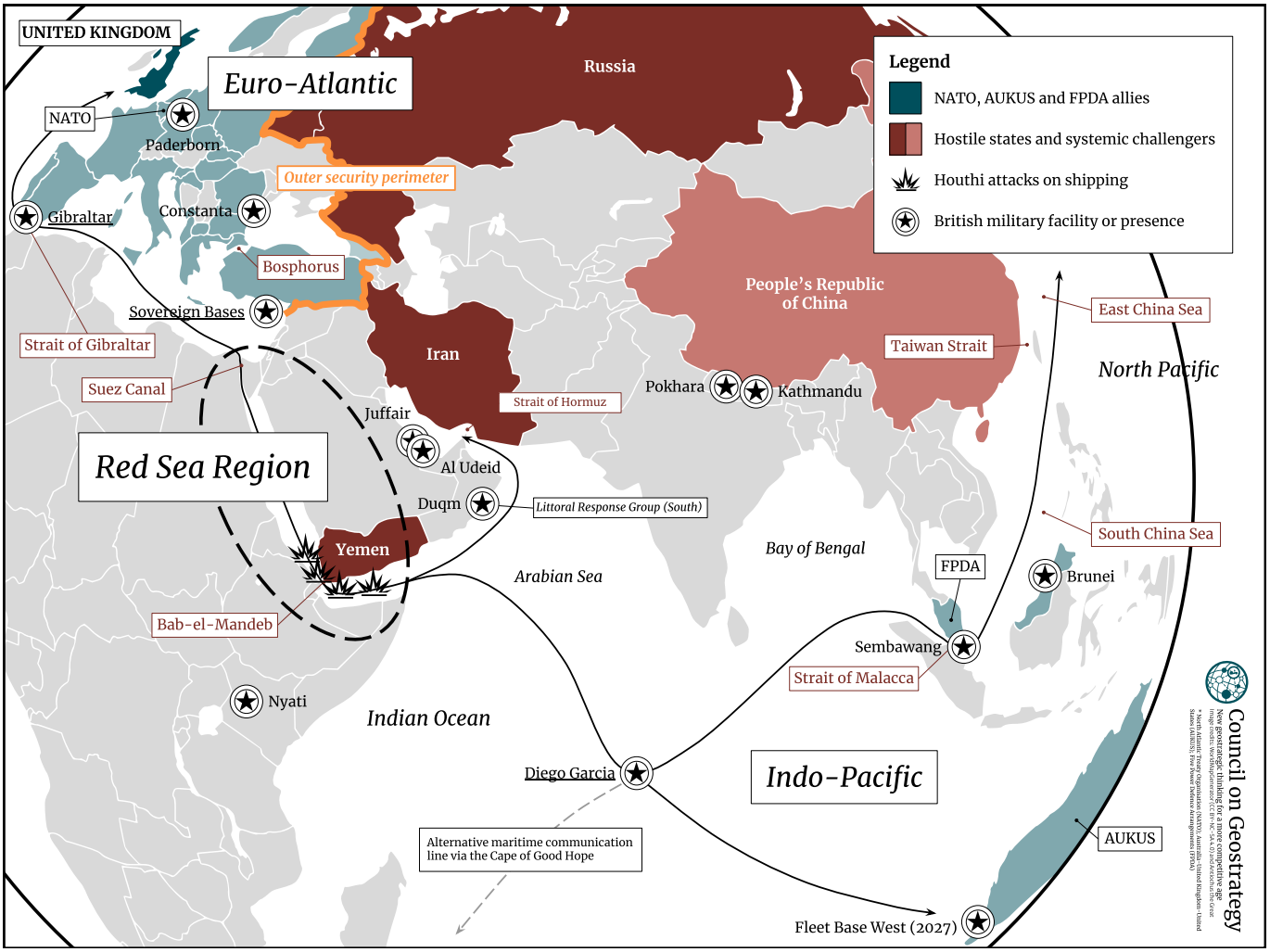
If visualised properly, maps can portray complex information in a way that the human brain can process and understand in seconds. That is why the Council on Geostrategy produces maps to depict geostrategic developments and phenomena, especially from a British vantage point.

Below are a couple of maritime geostrategic maps from the Council on Geostrategy's *GeoAtlas*.



The Royal Navy's global reach

As an instrument of national power, the Royal Navy provides the United Kingdom with extraordinary versatility.



The Red Sea: The Atlantic-Pacific link

A map depicting the importance of the Red Sea to British interests in the Euro-Atlantic and Indo-Pacific.

Word of thanks

We would like to express our gratitude to the Royal Navy, the event sponsors, the team at the Council on Geostrategy and all those who joined us for their support and active participation in the First Sea Lord's Sea Power Conference 2024. Our dedicated team was very busy organising the conference and ensuring it ran smoothly. We would like to acknowledge their hard work and commitment and express our gratitude to the Royal Navy for not only having faith in us to make this conference a success once again, but also for allowing us to expand it this year. Finally, we would like sincerely to thank our corporate partners – all 22 of them – for their active involvement and generous contribution in making this event possible.

James Rogers and Viktorija Starych-Samuolienė
Co-founders of the Council on Geostrategy

Our Partners

Generous support from the industry leaders enables us to organise a high-level event and discussions which enable the Royal Navy and navies of our allies and partners to uphold their competitive edge, develop an international seapower ethos fit for an era of intensifying geopolitical competition and preserve global stability, security and prosperity. We would like to sincerely thank our sponsors for their important contribution.

STRATEGIC PARTNERS

babcock™ BAE SYSTEMS COHORT PLC THE INDEPENDENT TECHNOLOGY GROUP

Helsing LOCKHEED MARTIN

PARTNERS

COALITION FOR GLOBAL PROSPERITY Britain as a force for good

L3HARRIS® LEONARDO MAERSK

MBDA modini Navantia UK QINETIQ

ROLLS ROYCE serco Stena

15-19 SEPTEMBER 2025 LONDON INTERNATIONAL SHIPPING WEEK

THALES Building a future we can all trust WALLENIUS OW LINES

DRINKS PARTNER

MoëtHennessy


FIRST SEA LORD'S
SEA POWER
CONFERENCE 2024


#SPC2024
ROYAL NAVY
SEAPOWER SERIES

Endnotes

[1] See: Philip Longworth, *The Art of Victory*, 1966, cited in Peter G. Tsouras, ed., *The Daily Telegraph Dictionary of Military Quotations* (London: Greenhill Books, 2005), p. 151.
[2] Geoffrey Till, 'The Ukraine War One Year In: A Retrospective', *The Naval Review*, 111:2 (2023), p. 13.
[3] Dymtro Pletenchuk, Ukrainian Navy spokesperson, quoted in: 'Ukraine says it has destroyed 15 Russian naval vessels in Black Sea during war', *Reuters*, 17/11/2023, https://www.reuters.com (checked: 12/04/2024).
[4] See: Julian Corbett, *Some Principles of Maritime Strategy* (London, 1911), p. 104 and Geoffrey Till, *Seapower: A Guide for the Twenty-First Century* (London: Routledge, 2018), p. 187.
[5] Don MacKinnon, 'Does Corbett's *Some Principles of Maritime Strategy* Still Have Something to Teach Us Today?', *The Naval Review*, 110:3 (2022), p. 332.
[6] Stansfield Turner, 'The Naval Balance: Not Just a Numbers Game', *Foreign Affairs*, 55:2 (1977), p. 347.
[7] Matthew Wills, 'The Russian Admirals and Vladimir Putin', *The Naval Review*, 112:1 (2023), p. 38.
[8] 'Moskva sinking: US gave intelligence that helped Ukraine sink Russia cruiser – reports', *BBC*, 06/05/2022, https://www.bbc.com/ (checked: 12/04/2024).
[9] Kali Robinson, 'Iran's Support of the Houthis: What to Know', Council on Foreign Relations, 01/03/2024, https://www.cfr.org (checked 12/04/2024).
[10] Kevin Rowlands, quoted in: 'Gun, boat, diplomacy', *The Economist*, 13/01/2024, p. 60.
[11] *Ibid.*
[12] Warren Murray, 'Ukraine war briefing: "Third of Russia's Black Sea fleet sunk or crippled"', *The Guardian*, 27/03/2024, https://www.theguardian.com (checked: 12/04/2024).
[13] Geoffrey Till, 'The Ukraine War One Year In: A Retrospective', *The Naval Review*, 111:2 (2023), p. 32.
[14] *Ibid.*
[15] Geoffrey Till, *Seapower: A Guide for the Twenty-First Century* (London: Routledge, 2018), p. 276.
[16] Geoffrey Till, 'The Ukraine War One Year In: A Retrospective', *The Naval Review*, 111:2 (2023), p. 28.
[17] Illia Novikov, 'Ukraine claims it has sunk another Russian warship in the Black Sea using high-tech sea drones', AP, 05/03/2024, https://apnews.com (checked 12/04/2024).
[18] Matthew Wills, 'The Russian Admirals and Vladimir Putin', *The Naval Review*, 112:1 (2023), pp. 37-38.
[19] Geoffrey Till, 'The Ukraine War: Another Year In', *The Naval Review*, 112:1 (2024), p. 14.
[20] Alfred Thayer Mahan, *Mahan on Naval Strategy: Selections from the Writings of Rear Admiral Alfred Thayer Mahan* (Annapolis: Naval Institute Press, 2015), p. 90.
[21] Quoted in: James Holmes, 'Anti-Access and the "Fortress-Fleet"', *The Diplomat*, 10/09/2012, https://thediplomat.com (checked 12/04/2024).
[22] See: Geoffrey Till, 'The Ukraine War: Another Year In', *The Naval Review*, 112:1 (2024), p. 27 and Matthew Wills, 'The Russian Admirals and Vladimir Putin', *The Naval Review*, 112:1 (2023), p. 35.
[23] Geoffrey Till, *Seapower: A Guide for the Twenty-First Century* (London: Routledge, 2018), p. 276.
[24] Geoffrey Till, 'The Ukraine War: Another Year In', *The Naval Review*, 112:1 (2024), p. 17.
[25] *Ibid*, p. 14.
[26] 'Gun, boat, diplomacy', The Economist, 13/01/2024, p. 60.
[27] Geoffrey Till, 'The Ukraine War One Year In: A Retrospective', *The Naval Review*, 111:2 (2023), p. 28.
[28] 'National Shipbuilding Strategy: A refreshed strategy for a globally successful, innovative and sustainable shipbuilding enterprise', National Shipbuilding Office, 10/03/2022, https://assets.publishing.service (checked: 08/04/2024).
[29] Paul McLeary, Connor O'Brien and Lee Hudson, 'Navy cancels ship briefings after damning internal report', *Politico*, 07/04/2024, https://www.politico.com (checked: 08/04/2024).
[30] 'Maritime Modularity Concept', Ministry of Defence, 02/02/2023, https://assets.publishing.service.gov.uk (checked: 04/08/2024).
[31] See: Bjorn H. Johnsen and Sigurd W. Hystaf, 'Hardiness and mental health during naval deployment: The relation is mediated by social processes and not by self-regulatory processes', *European Review of Applied Psychology*, 73:3 (2023) and Commander Sharon Daniels, 'Alternate Crewing Strategies', *U.S. Naval Institute*, November 2005, https://www.usni.org, (checked: 10/04/2024).
[32] See: James Cartlidge, Speech: 'Minister for Defence Procurement's speech at the Military Robotics and Autonomous Systems Conference in London', Ministry of Defence, 09/04/2024, https://www.gov.uk (checked: 10/04/2024) and Gregory C. Allen, Dr Matt Turek, Discussion: 'The DARPA Perspective on AI and Autonomy at the DOD', Centre for Strategic and International Studies, 27/03/2024, https://www.csis.org, (checked: 10/04/2024).
[33] 'It is broke – and it's time to fix it: The UK's defence procurement system: Government response to the Committee's Ninth report of Session 2022-23', House of Commons Defence Committee, 20/09/2023 https://publications.parliament.uk (checked: 08/04/2024).
[34] Sebastian Burns, 'Should the EU establish a standing navy?', London School of Economics, 08/04/2024, https://blogs.lse.ac.uk (checked: 10/04/2024).
[35] Peter Apps, *Deterring Armageddon: A Biography of NATO* (London: Headline, 2024).

[36] See: Malcolm Chalmers, 'Bracing for 2025: The UK and European Security Under a Trump Presidency', Royal United Services Institute, 28/03/2024, https://www.rusi.org (checked: 10/04/2024) and Justin Bronk, 'Europe Must Urgently Prepare to Deter Russia Without Large-Scale US Support', Royal United Services Institute, 07/12/2023, https://www.rusi.org (checked: 10/04/2024).
[37] Jonathan Panter and Johnathan Falcone, 'Why drone boats are an overhyped Achilles' fleet', *Bulletin of the Atomic Scientists*, 02/09/2023, https://thebulletin.org (checked: 10/04/2024).
[38] Emma Loffhagen, 'Conscription for Gen Z? None of us believe enough in the Army, or in the British state, to fight', Evening Standard, 01/02/2024, https://www.standard.co.uk (checked: 10/04/2024).
[39] Paul Carney, 'Inner Grit - The Mission to Prepare Gen Z Officers for War', *Soldier: Magazine of the British Army*, 03/2024, https://edition.pagesuite-professional.co.uk (checked:09/04/2024).
[40] Liz Kislik, 'Leaders, This Is How To Work With Gen Z Employees', *Forbes*, 16/07/2020, https://www.forbes.com (checked: 10/04/2024).
[41] Wayne Phelps, *On Killing Remotely: The Psychology of Killing with Drones* (New York City: Little, Brown and Company, 2021).
[42] Lauren Sanders, 'Symposium on Military AI and the Law of Armed Conflict: Bridging the Legal Gap Between Principles and Standards in Military AI – Assessing Australia's "System of Control" Approach', *OpinioJuris*, 03/04/2024, https://opiniojuris.org (checked: 10 April 2024).
[43] 'Proceed with Caution: Artificial Intelligence in Weapon Systems', AI in Weapon Systems Committee (House of Lords), 01/12/2023, https://publications.parliament.uk (checked: 10/04/2024).
[44] Marina Favaro, Online event: 'Nuclear Weapons and Artificial Intelligence: Understanding the Nexus and Mitigating Risks', Defence Nuclear Organisation, 13/03/2024.
[45] Alok Jha, Ainslie Johnstone and Tom Standage, Discussion: 'AI: Everything you need to know', *The Economist*, 04/04/2024, https://www.economist.com (checked: 10/04/2024).
[46] Frank Bajak, '"Adversarial AI" a threat to military systems, Shift5's Lospinoso says', *Associated Press*, 29/05/2023, https://www.c4isrnet.com (checked: 08/04/2024).
[47] 'Lessons Learned Tracking Process', NATO Lessons Learned Portal, No date, https://nllp.jallc.nato.int/ (checked: 10/04/2024).
[48] 'European Defence Fund: 'Indicative multiannual perspective 2024-2027: 14', European Commission, 15/02/2024, https://defence-industry-space.ec.europa.eu (checked: 10/04/2024).
[49] Ronald O'Rourke, 'Navy Large Unmanned Surface and Undersea Vehicles: Background and Issues for Congress', Congressional Research Service, 20/12/2023, https://sgp.fas.org (checked: 10/04/2024).
[50] George Allison, 'Impressive drone shots show new minehunting mothership', *UK Defence Journal*, 06/04/2024, https://ukdefencejournal.org.uk (checked: 10/04/2024).
[51] 'The Royal Navy has ambitious plans for its Future Maritime Aviation Force', *Navy Lookout*, 02/06/2023, https://www.navylookout.com (checked: 10/04/2024).
[52] Frankie Youd, 'Crewless cargo: the world's first autonomous electric cargo ship', *Ship Technology*, 24/02/2022, https://www.ship-technology.com (checked: 10/04/2024).
[53] See: 'Not enough sailors – another Royal Navy personnel crisis is brewing', *Navy Lookout*, 16/06/2023, https://www.navylookout.com (checked: 10/04/2024) and 'Positive signs for Royal Navy submarine manpower', *Navy Lookout*, 04/07/2018, https://www.navylookout.com (checked 10/04/2024).
[54] David Ingram, 'How Yemen's Houthi rebels have leveraged cheap drones into military success for nearly a decade', *NBC News*, 01/02/2024, https://www.nbcnews.com (checked: 10/04/2024).
[55] 'French Navy protects cargo ship by destroying four Houthi drones', *Navy Recognition*, 11/03/2024, https://navyrecognition.com (checked: 10/04/2024).
[56] 'Dragonfire – Pathway to a Laser Directed Energy Weapon for the Royal Navy?' *Navy Lookout*, 11/03/2024, https://www.navylookout.com (checked:10/04/2024).
[57] Jaspreet Gill, 'DoD hoping to build international cooperation on responsible AI, autonomy', *Breaking Defense,* 09/01/2024, https://breakingdefense.com (checked: 10/04/2024).
[58] Ruston Butcher, 'Gen Z Appeal: How the Royal Navy Got It Right', *Great State*, 04/04/2023, https://www.greatstate.co (checked: 09/04/2024).
[59] Christopher Hall, 'Britain, America and the Search for Comprehensive Naval Limitation, 1927-1936', Doctoral thesis, Oxford: University of Oxford, 1982.
[60] Matthew Heaslip, 'Changes and challenges: The Royal Navy's China Station and Britain's East Asian Empire During the 1920s', Doctoral thesis, Exeter: University of Exeter, 2018.
[61] Mallory Shelbourne, 'Davidson: China Could Try to Take Control of Taiwan In "Next Six Years"', *USNI News*, 09/03/2021, https://news.usni.org (checked: 15/04/2024).
[62] 'Maritime Operating Concept (MarOpC): The Maritime Force Contribution to the Integrated Operating Concept', Ministry of Defence (UK), 08/09/2022, https://assets.publishing.service.gov.uk (checked: 15/04/2024).
[63] 'Washington Conference 1921-1922', *Encyclopaedia Britannica*, 30/10/2019, https://www.britannica.com (checked: 15/04/2024).
[64] Graham Watson, 'Between the Wars: Royal Navy Organisation and Ship Deployments 1919-1939', *Naval History*, 02/09/2015, https://www.naval-history.net (checked: 15/04/2024).
[65] Ian Nish, *Anglo-Japanese Alliance: The Diplomacy of Two Island Empires 1984-1907* (London: Bloomsbury Publishing, 2013).
[66] John Maurer, '"Winston Has Gone Mad": Churchill, The British Admiralty, and The Rise of Japanese Naval Power', International Churchill Society, 05/09/2018, https://winstonchurchill.org (checked: 15/04/2024).
[67] David McIntyre, *The Rise and Fall of the Singapore Naval Base 1919–1942* (London: MacMillan Press, 1979).

[68] David Hobbs, *The British Pacific Fleet: The Royal Navy's Most Powerful Strike Force* (Barnsley: Seaforth Publishing, 2017).
[69] James Heappey, 'Russian: Defence Equipment', Parliament of the United Kingdom, 13/11/2023, https://questions-statements.parliament.uk (checked: 15/04/2024).
[70] Stratfor, 'Russia's Navy Has a Funding Problem', *Real Clear Defense* , 21/01/2016, https://www.realcleardefense.com (checked: 15/04/2024).
[71] Tayfun Ozberk, 'Analysis: Chain of Negligence Caused the Loss of the Moskva Cruiser', *Naval News*, 17/04/2022, https://www.navalnews.com (checked: 15/04/2024).
[72] Ben Key, Speech: 'First Sea Lord's speech to the Council on Geostrategy', 19/07/2022, https://www.royalnavy.mod.uk (checked: 15/04/2024).
[73] Jennifer Welch, Jenny Leonard, Maeva Cousin, Gerard DiPippo and Tom Orlik, 'Xi, Biden and the $10 Trillion Cost of War Over Taiwan', *Bloomberg UK*, 09/01/2024, https://www.bloomberg.com (checked: 15/04/2024).
[74] Harry Lye, 'Exclusive: Royal Navy Second Sea Lord on ships, the defence command paper, and the future Indo-Pacific presence', *Shephard Media*, 05/05/2023, https://www.shephardmedia.com (checked:15/04/2024).
[75] 'Maritime Operating Concept (MarOpC): The Maritime Force Contribution to the Integrated Operating Concept', Ministry of Defence , 08/09/2022, https://assets.publishing.service.gov.uk (checked: 15/04/2024).
[76] Lucas Myers, 'China's Economic Security Challenge: Difficulties Overcoming the Malacca Dilemma', *Georgetown Journal of International Affairs*, 22/03/2023, https://gjia.georgetown.edu (checked: 15/04/2024).
[77] Naval News Staff, 'Royal Navy Aircraft Carrier Returns Home After Completing CSG21', *Naval News*, 10/12/2021, https://www.navalnews.com (checked: 15/04/2024).
[78] David Hobbs, *The British Pacific Fleet: The Royal Navy's Most Powerful Strike Force* (Barnsley: Seaforth Publishing, 2017).
[79] Distances to Luzon Strait via nearest sea route that excludes South China Sea: Visakhapatnam 4,210 nautical miles, British Indian Ocean Territory 4,470 nautical miles, Duqm 5,735 nautical miles, Perth 3,550 nautical miles, Sydney 4,060 nautical miles, and Honolulu 4,440 nautical miles.
[80] The People's Liberation Army H-6 bomber has a theoretical unrefuelled engagement range of 4,500 kilometres using the CJ-20 cruise missile or 5,000 kilometres using the CJ-100 cruise missile.
[81] 'UK/Japan: Agreement concerning the Facilitation of Reciprocal Access and Cooperation between the Self-Defense Forces of Japan and the Armed Forces of the United Kingdom of Great Britain and Northern Ireland', Foreign, Commonwealth and Development Office, 09/11/2023, https://www.gov.uk (checked: 15/04/2024).
[82] Stephen Dziedzic, 'Japan to take part in AUKUS "Pillar 2", America's ambassador to Japan tells Wall Street Journal', *ABC News*, 05/04/2024, https://www.abc.net.au (checked: 15/04/2024).

Notes

Notes

LONDON SEAPOWER SERIES

ROYAL NAVY

Council on Geostrategy

KING'S College LONDON

https://www.geostrategy.org.uk/sea-power-conference-2024/