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This shock to NATO should send a shock wave through Whitehall

Roderick Crawford, Editor.

PRESIDENT Trump's demands on Denmark for Greenland and his insistence that he will take it by hook or by crook represent a new level of crisis for the Transatlantic alliance. It is a point at which the alliance could have broken-down, potentially changing the outcome of the war in Ukraine and forcing decisions on the future of the EU on its member states that would be as unwelcome to them as to the UK. What is certain is that, despite the evidence and experience that the US

is strongest within its alliances, it is the Europeans who would have felt the chill of this Arctic storm most. US security in the short term would be unlikely to change much; that of Europe would be hazarded.

The Greenland claim has been in the wings a while – though there was no mention of it in the National Security Strategy; perhaps the President's inaction over Iran has pushed him into exertion closer to home.

Europe's response was the worst of all world's – an

attempt to defend Greenland from the US under the guise of securing it against China and Russia. No element of this had any credibility. It antagonised the President: it did not reassure. No doubt it will be misinterpreted by Brussels.

If President Trump is feeling threatened by the lack of security in the Arctic, and Greenland in particular, and this is not without reason, then addressing that perceived threat as well as the real threat is all important.

European states' ability to deploy warfighting combat units has decayed since the end of the Cold War to levels that will be hard to recover from. Though the public discourse has been that the US has been pulling out of the defence of continental Europe post-1989, peace dividend and then

to resource warfighting and peace-making in Afghanistan and Iraq as well as to make its preparation for a confrontation with China, it is Europe that has actually abandoned European defence. Blaming the US fails the test of the evidence of

spending and capability and how those relate to the direct threat to NATO's European members.

Even in 2014 when Russia seized Crimea and parts of Donbas, and in 2022 when Russia invaded Ukraine, Europe did not rearm. What forced its hand was the February 2025 Trump-Putin call. Germany, which once fielded heavy combat forces on NATO's central front, had all but abandoned the idea of warfighting. The UK has let its army decline even

further since 2014; it remains underfunded across all its arms and is currently able to field about a brigade, though probably not sustain that over time. The Royal Navy is a shell of its nominal strength.

There has been a late awakening in 2025, not only to the security threat, but to our own neglect. Prior to 2022, as threat has grown, the UK actually reduced capability. That is a rare achievement. Since then and February 2025 we have prioritised public services and welfare but not defence. If Washington – not just the President – has given up on us, we have ourselves to blame.

Where do we go from here? Firstly, let's stop pretending that we are currently addressing the gap between the threat we face and the resources we can deploy to

meet it. We are nowhere close to doing this. We have under invested and recruited for decades. To catch up will require raising funds on the bond markets to address equipment funding gaps of upwards of £28bn – and they need to be met in the next

few years, not over a decade. This probably means something around £25bn raised now and much of it spent on equipment based on urgent operational requirements, thus avoiding the procurement failures that haunt all major equipment programmes. The bond markets will buy – deterrence secures peace and peace is the pre-requisite for prosperity, theirs as well as the nation's. The British state would be looking serious – at last. Recruitment needs addressing

“If President Trump is feeling threatened by the lack of security in the Arctic, and Greenland in particular – and this is not without reason – then addressing that perceived threat as well as the real threat is all important.”

immediately, with the Serco contract made non-exclusive and the services recruiting again directly with new approaches and with other contractors involved too. Armed forces housing can be funded out of the extensive social housing funds Angela Rayner won and the MoD funding allocated for it moved to operational readiness and recruitment.

On the Arctic front, we need to step up with a security framework that secures

decades. We are in no position to argue on this – the task is to address it properly. During the Cold War, a US-led NATO secured German, as well as wider European and North American security; if Germany accepted this not only in 1955 but even after 1989, then so too can Denmark as regards Greenland.

To make it credible, a NATO operational command, perhaps under Norfolk Virginia, should be established with key assets



and deters but does not threaten Russia. The NATO approach accepted by President Trump is the right way to go; getting the implementation right and sustaining it will be the challenge. The Arctic needs détente, based on deterrence, not an arms race. Denmark's Joint Arctic Command is no longer a convincing deterrence against Russia or reassurance for the US. However real the threats may be from Russia, the perception of threat is the driver, and that is high in presidential circles, fuelled by a consistent history of European weakness and failure on defence over the last few

decades. We are in no position to argue on this – the task is to address it properly. During the Cold War, a US-led NATO secured German, as well as wider European and North American security; if Germany accepted this not only in 1955 but even after 1989, then so too can Denmark as regards Greenland. To make it credible, a NATO operational command, perhaps under Norfolk Virginia, should be established with key assets

maintenance backlogs addressed. The Royal Marines, already trained for northern Norway, should be enhanced – that means more recruitment and kit – with HMS Bulwark – if it is not too late – returned to Royal Navy service immediately, demonstrating UK commitment is real.

In terms of allies and command, it would be preferable to offer the US command of Arctic NATO command or under that of the UK. Germany and France have enough on their hands in central Europe and perhaps, in time, the Med. There should be a push back against the EU's Arctic strategy – the Arctic strategic area is essentially outside of the EU, and the EU has no ability to deploy anything substantial – even with an icebreaker. It provokes, without achieving anything real. The last thing that is needed is any more great power rivalry in the Arctic.

A UK focus within a Transatlantic NATO command fits our level of deployable resources as well as our own security needs – directly and indirectly. If we can make the US feel safe, and through investment and deployment address deeply held US assessments of the UK's reliability – assessments that are sadly far more accurate than the glossy brochures that pass as UK command papers – then we can rescue the security of the North Atlantic and the Transatlantic and special relationships from the peril they now face. No mean aim.

Sir Keir Starmer has played a good game with President Trump. That game has reached its limits. Now is the time to end that game and put resources on the table and commit them to US as well as continental security. A substantial move now, backed by investment, gives us the best chance to keep the US in transatlantic security arrangements and the resources to make a modest but reliable contribution to the security of the continent. We too

must be realistic; if we fail to keep the US in the alliance with an in-depth and funded strategy that convinces Washington that we are for real again, then we will be forced to pay out even more in the absence of US engagement. At present that US engagement is considerable across every realm of warfighting. Lose the US, and you can add another £50bn to that bill – and many hundreds of billions of euros – and still lack the power to deter war.

The President needs assurance that we have his back and that he can sell this to the American people as a win for the US. The Arctic is the right domain for the UK to take the lead in deployments. We can cobble together deployable force even now

“If we can make the US feel safe then we can rescue the the trans-Atlantic and special relationships. No mean aim.”

as an Arctic taskforce that is credible in US eyes. We can build onto that the bases and allies that will provide deterrence and security for the US, Denmark/Greenland, ourselves, the Nordic countries – and have the back for continental Europe.

At the height of our naval power we were concerned with the North Sea, the Atlantic and Arctic to the exclusion of pretty much all else. This is a familiar role for us. We can afford, if we fund the equipment gap, to do this well and sustain it over time. It is the best contribution that we can make to Western security, stability and deterrence – and thus our prosperity. It would cement Sir Keir Starmer's Labour Party as the true party of Government and give the UK a role that is equal to its global reputation and history but credibly within our resources.

A hybrid Navy: rethinking maritime power

Peter Spayne - Consultant on AI, autonomous systems, and maritime uncrewed technologies.

THE Royal Navy's shrinking fleet has become an easy target for critics looking to make an easy argument. There are fewer ships than in previous decades – obviously, therefore the navy must be underfunded or in decline: nope. Neat narratives miss the complexity of the situation, and don't reflect reality.

The United Kingdom remains one of the largest defence spenders in the world, ranking at No 6 with a spend of \$81.8bn, behind the USA, China, Russia, Germany and India. In terms of GDP however the UK ranks 30th with only 2.3% of GDP dedicated to the military burden. Unsurprisingly the top ten in terms of GDP are dominated by economically smaller countries engaged in active conflict. If the Royal Navy is not short of money, why the perceived decline?

Naval procurement alone absorbs enormous resources. The problem is within the machinery of defence spending itself. Modern procurement is layered with processes designed to eliminate waste, risk and error. That is sensible, in principle, but in practice it creates a system of blind process and conflicting tunnel visions where the cost of preventing small losses far exceeds the losses themselves. Vast sums are spent on internal assurance structures and audit mechanisms with

questionable economic logic. When the cost of preventing a minor inefficiency becomes larger than the inefficiency itself, the system begins to work against its own purpose. The procurement system ends up protecting and subsidising an almost untenable culture of 'how it's always been done' that no one asked for or wants and spends significant energy trying to navigate and manage.

Often, equipment that could be procured commercially is pushed through demanding specification regimes. While there are cases where this is clearly necessary, these processes test products to extremes ensuring they comply with very high-level standards, despite the fact that often, the extreme specifications may never be relevant to their actual operational use. Due to modern commercial-build standards, the equipment itself frequently remains unchanged; while the testing simply proves it can survive harsher conditions and generates certification to say so. The outcome is a vast multiplication of cost for increasingly exquisite platforms and equipment in much smaller numbers than originally intended. This approach has shaped naval doctrine.

Fantasy fleet designs detail quantities of highly specialised ships designed to

operate together in task groups. Each vessel type performing a specific primary function; air defence destroyers protect the group from aircraft and missiles; anti-submarine frigates hunt submarines; aircraft carriers project air power and command capability; minehunters clear sea lanes but rely on others for protection. This system works because each ship compensates for the vulnerabilities of the others. The difficulty emerges when that structure breaks apart due to small hull numbers and unavailability. With fewer ships available, vessels designed to operate in large groups operate with gaps in their defensive formation, or even alone.

At the same time, the character of warfare has changed. Decades of defence spending in preparing to defeat very small numbers of sophisticated adversaries armed with advanced missiles, submarines and aircraft has now become secondary. Our highly capable, phenomenally complex and vastly expensive warships face rather more rudimentary threats – and in astonishing numbers.

This exposes an uncomfortable weakness. Highly sophisticated systems can still be challenged by sheer quantity. Large numbers of cheap drones, improvised maritime weapons and relatively rudimentary attack systems augmented with high quality, commercially available, cheap technology can overwhelm the most advanced defences just by being different and plentiful. A destroyer designed to

defeat cutting-edge supersonic missiles that attack from a low-earth orbit struggles when confronted with dozens of low and slow threats arriving in vast waves. Despite their being secondary and tertiary point defences able to operate within the attack vectors of the new drone threat and defeat it in small numbers, there is no such thing as infinite ammunition. As defensible as the new threats are, it's becoming less likely that a modern warship will get through an engagement with a clean sheet. Naval warfare is therefore adapting again to meet the hybrid of old, new and new-old technology. The ongoing debate around mine warfare in the Gulf illustrates this well. Traditionalists often point to the

“Large numbers of cheap drones, improvised maritime weapons and relatively rudimentary attack systems augmented with high quality, commercially available, cheap technology can overwhelm the most advanced defences”

declining number of dedicated minehunters and lament their disappearance. Yet minesweepers effectively disappeared decades ago; by the late 1990s they had largely all been replaced by minehunters, vessels designed to locate and neutralise individual mines rather than sweep entire areas indiscriminately. However, the traditionalist argument neglects to mention that minehunters now

reaching the end of their heavily extended service lives, many over thirty or forty years old operating on 1960s era technology, were built in a very different era, before the word ‘drone’ was even coined. Despite still being in service in some cases, their defensive capability is minimal. Ships of this calibre were never designed to operate in drone denied

coastal environments, under threat from modern precision weapons, while simultaneously clearing mines. The littoral environment has changed dramatically, so much so that the threats encountered today did not even exist as recently as 2021.

Coastal missile systems have been around for decades, exquisite loitering munitions for a short time, but very cheap drones that can be arguably categorised as loitering munitions, available in huge numbers, mean that sending manned ships into narrow waterways within the range of an almost endless supply of land-based weapons is astoundingly risky, bordering suicidal, unless succeeding a brutal bombing campaign to neutralise launch sites and industrial bases. In such a scenario, escorting a minehunter with a destroyer or frigate does not solve the problem. It just means more allied ships are placed in harm's way at a staggering human cost.

A new approach is needed and uncrewed systems begin to make sense in this context. Uncrewed surface vessels and underwater vehicles are still relatively immature technologies and often criticised for their limitations. They rely on vast infrastructure and reliable communications links despite the claims of autonomy and AI doing the lifting. They almost all require remote operators. Uncrewed vehicles (UxV) are technologically immature compared with traditional platforms and can easily be disrupted or destroyed despite the mitigation that there is a far smaller risk to life.

Hybrid Navy

Hybrid Navy is not about replacing crewed for uncrewed. It is about developing a diverse tool kit to allow the best asset for the job to be available for any task. That asset might not look like a ship anymore.

Uncrewed systems exist to facilitate operations in environments too dangerous for manned ships to operate comfortably within. This is the naval equivalent of using drones instead of vulnerable aircraft. Originally the argument was made that uncrewed systems removed the man from the minefield. That argument was admirable and leaves open the retort that if something is not broken, why fix it: the ships of yesteryear allowed men to clear minefields in relative safety. However, this simple argument fails to account for the small complication that due to the new

“The loss of equipment is inconvenient; the loss of a crewed warship is strategically and politically catastrophic. Using uncrewed systems is therefore an evolution to enable operations in much harsher operating environments which are themselves dominated by uncrewed systems.”

drone threat the minefield has become largely inaccessible. Therefore, in order to gain access to the minefield in the first place, an uncrewed system must be employed.

If a small, comparably cheap uncrewed vehicle is lost while clearing a minefield, the mission continues; another system replaces it and no one goes home with a flag draped over their coffin. The loss of equipment is inconvenient; the loss of a crewed warship is strategically and politically catastrophic. Using uncrewed



1st Sea Lord, General Sir Gwyn Jenkins KCB OBE RM delivering his Keynote Speech at the First Sea Lord's Sea Power Conference 2025 where he emphasised the need to develop a warfighting hybrid Navy of the Atlantic Bastion, Atlantic Shield, and Atlantic Strike, guided by the principle of being uncrewed wherever possible and crewed only where necessary. (Photographer: CPO Phot Dave Jenkins; Copyright: UK MOD © Crown copyright 2025.)

systems is therefore an evolution to enable operations in much harsher operating environments which are themselves dominated by uncrewed systems.

Much of the debate around uncrewed systems is influenced by how they are being visualised. Public narrative is shaped by promotional imagery and concept art that unintentionally reinforces outdated assumptions. Many of the 3D images used to depict future autonomous naval systems show vessels that look almost identical to traditional warships. They have the familiar silhouette of frigates or destroyers, complete with bridge windows, deck fittings, ropes and flags. The invisible difference is that there is supposedly no crew on board – to

operate the very human ergonomic design. This imagery is deeply misleading. It suggests that the future fleet will simply consist of traditional ships with the people removed. That is not the case.

Autonomous systems do not need to resemble ships; the point is to evolve individual capabilities, not replace entire hulls with more of the same, sans staff. Sensors and effectors do not have to be packaged into hulls that look like frigates or destroyers. In many cases the most effective solution will not resemble a ship in any conventional sense. Situational awareness, for example, is achieved through the processing, visualisation and mapping of sensor data to create an image of the battlespace. A 1980s design of

RADARs and SONARs to achieve this relied on mounting sensors on frigates then deploying them sometimes exclusively for data gathering. Increasingly this task is better suited to much smaller distributed networks of privately operated sensors rather than individual platforms. A private company might operate a constellation of uncrewed systems or sensor equipment that feeds a streaming service of data directly into command systems – like GPS. The military may not own or operate the hardware producing the information; just purchase a subscription to the stream of received data as another input into the operational picture. In such a model, naval operators care less about the platform generating the information and more about the accuracy of the data itself. The sensor and enabling contract to its owner is the capability, not the vessel carrying it. This same principle applies across the entire maritime battlespace. Rather than imagining a frigate-sized uncrewed radar ship patrolling the oceans, painted grey, it is more realistic to understand that unseen spatial data collection of vast areas will be procured by a contracted distributed web of sensors in many forms and be piped to a small number of combat systems with human operators in need of situational awareness. The navy does not need to be directly involved in collecting that data. It simply needs reliable access to it. Exactly the same logic extends beneath the surface. Underwater sensing and monitoring may increasingly rely on networks of autonomous vehicles, seabed sensors and remotely operated systems rather than dedicated frigates conducting patrols with towed sonars.

This does not mean that crewed warships are disappearing. Quite the opposite. Frigates, destroyers and carriers remain essential because complex tasks require large crews and robust defensive capabilities. Combat operations, damage

control, sustained deployments and high-end warfare all demand the presence of people at sea. When it is still impossible to leave a printer unattended for too long, it's a huge ask to expect a complex warship will run for months without human involvement. But secondary functions, including gathering sensor data, monitoring maritime activity, or clearing mines under heavy air threat do not require sailors to be placed in harm's way. They can oversee from afar.

This is the broader logic behind the idea of the “hybrid navy”, a concept increasingly discussed by the First Sea Lord General Sir Gwyn Jenkins. A hybrid navy does not abandon traditional warships: destroyers, frigates and carriers remain essential for command, protection and heavy strike capability. What changes is how maritime capability is generated. Instead of relying exclusively on a small number of highly capable crewed platforms, future fleets combine those ships with networks of uncrewed vessels and autonomous sensors via digital targeting data architectures; extending the reach and awareness of traditional platforms while mitigating the new risks associated with operating in contested environments.

Individually, many of these new technologies appear fragile or imperfect. But when partnered with traditional capabilities they form a distributed system in which the weakness of one element is offset by the resilience of the whole. In this model, naval power cannot be measured by counting hulls or tonnage. Maritime effect is produced through dozens of interconnected nodes, some traditionally crewed and many not. That is the essence of the hybrid navy. It reflects a recognition that the future of maritime warfare lies not in building ever more exquisite ships alone, but in the integration of ships, autonomous systems and a vast digital network into a single ecosystem.

A Growth Strategy that Imperils Defence

Ron Smith - Emeritus Professor, Birkbeck University of London

THE Defence Industrial Strategy should have been subtitled “Making the Weapons We Need”, not “Making Defence an Engine for Growth”. Growth has become an objective, distorting decision-making about the primary function of policy: efficient acquisition of the armaments the UK needs. The SDR compounds the problem, seeking to achieve deterrence now whilst seeking to deliver this within a ten-year financial framework. And the problems don’t end there.

The UK government’s September 2025 Defence Industrial Strategy is subtitled “Making Defence an Engine for Growth”. This seems a misplaced priority, it should have been subtitled “Making the Weapons We Need”. A consequence of defence policy — economic spill-overs — has become an objective, distorting decision-making about the primary function of the policy: efficient acquisition of the armaments that the UK requires. The Defence Industrial Strategy contains much about the defence dividend and how the Ministry of Defence (MoD) should maximise its potential to drive economic growth, but less about determining what weapons are needed and how they should be procured and financed.

Financing is a particular problem. Introducing the 2025 Strategic Defence Review (SDR25), the Prime Minister said

“We are delivering our commitment to spend 2.5% of GDP on defence, accelerating it to 2027, and we have set the ambition to reach 3% in the next Parliament, subject to economic and fiscal conditions.”¹ But this will not provide enough money to do what was promised in either SDR25 or the Defence Industrial Strategy, and in consequence publication of the Defence Investment Plan (DIP), promised for Autumn 2025 was postponed. Press reports say that in December 2025 the Prime Minister asked for the Defence Investment Plan to be reworked because of questions about affordability and that it is not now expected till March 2026. These changes in the defence budget are quite marginal relative to some previous rearmaments. The Korean War rearmament raised defence from 7.3% of GDP in 1950 to 11.1% in 1953.

This policy brief explains why letting the growth and prosperity agenda drive defence policy is a mistake. It then looks at the threat, the money, the industrial policy and the procurement process, and concludes with examples of good and bad practice.

Growth?

The current emphasis on growth in defence planning has its origins in a tendency to goal displacement that began in the 1990s. With the end of the Cold War,

governments felt unable to justify defence spending in military terms so shifted to justifying it in economic terms. The problematic nature of this shift prompted metaphors like trying to hit two birds – security and prosperity – with one stone, and letting the economic tail wag the military dog. The government is also accused of taking its eye off the many balls in the air, including the increasing security threat, US unreliability and the technological transformation of the nature of war.

The shift to an emphasis on economic consequences is explicit in the 2015 Defence Review, which set three national security objectives: protect our people; project our global influence; and promote our prosperity. Defence Ministries know about protection and power projection, they have neither the expertise nor the instruments to promote prosperity, this is the job of other Departments. It is hard enough trying to buy the right weapons, without complicating the process with other concerns. The prosperity agenda also gives a powerful lever to domestic monopolists to argue against imports.

The Defence Industrial Strategy says we will strengthen our national security through the strong deterrence provided by a strong industrial base whilst supporting economic prosperity so that every region and nation of the UK benefits from the defence dividend. This suggests that you can have both security and prosperity, that there is no trade-off. But trade-offs are inevitable. Central Banks set interest rates by balancing less inflation against more unemployment. Finance Ministries set defence budgets by balancing more security against its opportunity cost, less money for other things. These are macro trade-offs. The micro trade-offs in acquiring a tank involve finding the cost-effective balance between protection, mobility and firepower, not how the tank

can contribute to prosperity. Not only is there a lot that can go wrong when trying to balance multiple poorly defined objectives, it slows everything down.

The negative effects of the emphasis on a prosperity agenda at the expense of defence considerations are now widely recognised. In A RUSI Journal article on the security prosperity paradox², William Parker argues that the merger of national security and national prosperity has caused the UK's strategic decision-making and prioritisation efforts to have grown increasingly vague and indecisive.

Similarly, in a RUSI commentary on the false promise of defence as prosperity³ Noah Sylvia and Khem Rogaly argue that “Framing defence spending as a path to prosperity ignores its poor economic returns, limited job creation, and the opportunity costs of not making alternative public investments.”

In a Wavell Room article⁴ Laurence

“The shift to an emphasis on economic consequences is explicit in the 2015 Defence Review, which set three national security objectives: protect our people; project our global influence; and promote our prosperity.”

Thomson argues that there are three areas of concerns regarding the Defence Industrial Strategy. First, it risks confusing economic policy with strategic and military deterrence so that the emphasis on jobs and regional regeneration could dilute the much-needed focus on lethality, readiness and operational capability.

Second, it is not clear that British industry has the capacity and ability to deliver it. Third, its delivery lacks fiscal credibility.

In the Defence Industrial Strategy's section "Fixing Defence Procurement", the secondary objectives are given prominence, with the primary objective tagged on at the end.

"By introducing a consistent approach to commissioning new programmes, we will ensure decisions on procurement are informed by the full range of government policy drivers, including export potential, growth and other strategic factors, at the earliest stage in the acquisition process, in addition to the fundamental objective of equipping our service personnel."⁵

The UK uses the VSTOL F35B on its aircraft carriers but has announced the purchase of 12 F35A⁶ aircraft that can be used to deliver US nuclear weapons. The UK would join the nuclear sharing program in which Belgium, Germany, Italy, the Netherlands, and Turkey host US nuclear weapons and have aircraft that can deliver them. The US controls these weapons. This is a major strategic change, but the announcement emphasised the economic benefits: "Order will support 20,000 jobs across the UK, with over 100 UK-based suppliers contributing to the F35 programme."

These secondary objectives are embodied in defence contracts through a minimum of 10% of the total tender evaluation weighting being given for social value⁷. The MoD's social value priorities include tackling economic inequality; fighting climate change; equal opportunity; enhancing mental and physical health for communities impacted by defence



The UK will purchase 12 nuclear capable F35A aircraft. (Credit SAC Tim Laurence, Crown Copyright 2019).

activities; community cohesion: building stronger relationships between military and civilian populations. These are all desirable outcomes and, in some cases, may bring military benefits: skills creation and supply chain resilience are directly related to the strength of the defence industrial base. But it should be the military benefits that matter, particularly given the nature of the security threat the UK now faces.

Threat?

In her first speech in December 2025 Blaise Metreweli Chief of the Secret Intelligence Service argued that the rules of conflict are now being rewritten and that "Our world is more dangerous and contested now than it has been for decades. We are now operating in a space between peace and war."⁸ In this space the Russians are exporting chaos by cyberattacks on critical infrastructure; drones buzzing airports

and bases; aggressive activity in our seas, above and below the waves; state-sponsored arson and sabotage; propaganda and influence operations that crack open and exploit fractures within societies. In a speech at the same time the Chief of the Defence Staff, also argued “that the situation is more dangerous than I have known during my career and the price of peace is rising.”⁹

Ukraine showed how fast traditional munitions are exhausted and how fast technology is changing the character of war. The US National Security Strategy noted “The huge gap, demonstrated in recent conflicts, between low-cost drones and missiles versus the expensive systems required to defend against them has laid bare our need to change and adapt.”¹⁰

Designing a response to the threat is made more difficult by the unpredictability of the US. Much of the language of its National Security Strategy, is critical of Europe including “activities of the European Union and other transnational bodies that undermine political liberty and sovereignty ... and loss of national identities and self-confidence.”¹¹ Later, it says “This lack of self-confidence is most evident in Europe’s relationship with Russia. European allies enjoy a significant hard power advantage over Russia by almost every measure, save nuclear weapons. As a result of Russia’s war in Ukraine, European relations with Russia are now deeply attenuated, and many Europeans regard Russia as an existential threat. Managing European relations with Russia will require significant U.S. diplomatic engagement, both to re-establish conditions of strategic stability across the Eurasian landmass, and to mitigate the risk of conflict between Russia and European states.”¹²

The National Security Strategy is not all negative, later it says “America is, understandably, sentimentally attached to

the European continent — and, of course, to Britain and Ireland.”¹³ However, a sentimental attachment is probably not enough given the dependence of the UK on the US for its nuclear missiles, intelligence cooperation through Five-Eyes, space-based assets, and much equipment including F35s. But rather than diversify or hedge, the Defence and Industrial Strategy seeks to “Maximise and expand industrial and technological collaboration with the USA.”¹⁴

If the UK cannot rely on the US, its industrial policy needs to build more links with Europe. The European defence industry is substantial. In the Stockholm International Peace Research Institute list of 100 largest arms companies¹⁵ about a quarter of the firms are European and they account for about a fifth of the total spending. But Europe is too fragmented to exercise hard power or produce efficiently. Where the US produces a single type of tank or aircraft, Europe produces many. European arms companies are too small because national governments defend national champions and as a result lose the benefits of a division of labour, economies of scale, and learning curves.

Money?

One of the authors of SDR25, General Sir Richard Barrons, has pointed out that the money for it was arriving more slowly than the risks, and that SDR25 was set two requirements which were always at odds. The first was to determine what needed to be done for deterrence and, if necessary, fighting in the new strategic reality. The second was to establish what could be done to deliver this outcome within a 10-year financial profile.

Public expenditure is normally planned with a five-year horizon. The 2025 Spending Review set figures till 2028-9 for current spending, and 2029-30 for capital spending. However, big defence projects



David Williams, Permanent Secretary at the Ministry of Defence, April 2021 to November 2025, had to grapple with the hole in MoD budgets. (Photographer: Cpl Tim Hammond. Copyright: UK MOD © Crown copyright 2023.)

have decades long horizons. This is provided by the equipment plan, now renamed the Defence Investment Plan (DIP). The Defence Industrial Strategy says that to improve our signalling of defence requirements to industry we will deliver the Defence Investment Plan by Autumn 2025. Not only was it not delivered, there was a six-month delay in appointing the new National Armaments Director, Rupert Pearce.¹⁶

Both MoD and the National Audit Office (NAO) agreed that the last equipment plan in 2023 was unaffordable. In March 2023 MoD forecast total equipment costs of £305.5bn over the next ten years against a budget of £288.6bn. The ring-fenced nuclear deterrent costs of £117.8bn exceeded budget by £7.9 billion. The whole defence budget showed a ten-year deficit of £42.5bn. These relate to the previous government – we await the figures for this

government. Press reports suggest that the gap in the Defence Investment Plan between the cost of implementing SDR25 and the proposed budget is £28bn.

Sir Richard Barrons thought that the combined effects of inflation, foreign exchange movement, shortcomings in programme delivery, and the re-costing of recommendations meant that perhaps £2bn has to be saved in-year to balance the books. The savings could come from training, routine activity and maintenance, which reduce readiness, but it also means not much money is available for the new requirements identified in SDR25.

Laurence Thomson also reported that industry voiced concerns about bureaucratic inertia and the slow translation of strategic ambition into executable contracts, with some firms publicly citing delays in purchases as

emblematic of systemic issues.¹⁷ Leonardo who had been waiting for over a year for an order for AW149 helicopters, where it is the only bidder, is threatening to leave the UK and close the Westland plant in Yeovil.

Overambitious plans, for which there is not enough money, cause waste and mismanagement. Britain spent £72m on a mid-life upgrade of the amphibious assault ship HMS Bulwark, then sold it to Brazil for a reported \$26m. Bulwark's sister ship HMS Albion has been withdrawn from service due to manning and budgetary problems.

Industrial policy

The objectives of the Defence Industrial Strategy – “we will reform procurement, innovate at wartime pace, and grow our industrial base” – are laudable, but there is no evidence that the Government is willing to make the hard choices required to implement them. As it states, “Previous defence industrial strategies have failed where ideas are prioritised over implementation,”¹⁸ yet the current strategy seems likely to fail for the same reason.

Since the 1950s British Defence Policy has been described in terms of a persistent imbalance between resources, capabilities and commitments. At regular intervals that imbalance becomes unsustainable and prompts a defence review that does not resolve the contradictions. Ben Wallace, then Defence Secretary said, in

the foreword to the 2021 Defence Command Paper published alongside the Integrated Review: “Previous reviews have been over-ambitious and under-funded, leaving forces that were overstretched and under-equipped.”¹⁹ The 2021 Defence Command Paper and Integrated Review had to be rapidly refreshed with an update in 2023.²⁰ The Labour Defence Secretary, John Healey, announcing the terms of reference for the SDR25 said “we need a new era for defence. Hollowed-out armed forces, procurement waste and neglected morale cannot continue.”

²¹

“MoD and the National Audit Office (NAO) agreed that the last equipment plan in 2023 was unaffordable. MoD forecast total equipment costs of £305.5bn over the next ten years against a budget of £288.6bn. The whole defence budget showed a ten-year deficit of £42.5bn.”

Given the unpredictability of threats and the impossibility of optimising against unknowns, a common analogy is to treat defence policy as an insurance policy. You do not know what may occur, so you pay a premium, a defence budget of some percentage of GDP, which is invested in such a way that it pays off by reducing damage if an adverse event, such as a threat, materialises, and possibly deterring the threat. What the optimisation approach may regard as inefficient

redundancy, the insurance approach regards as useful given the uncertainty: just in case rather than just in time. But you cannot afford everything, so you have to choose.

The choice is between specialisation and diversification. Specialisation involves acquiring relatively few, “exquisite” platforms, like aircraft carriers, optimised for particular roles. These platforms have to be provided with arms, personnel,



Rt Hon. John Healey, Secretary of State for Defence since July 2024, is faced with implementing policy in the most dangerous and unstable environment in living memory. The shortfall in the yet to be published Defence Investment Plan is reported to be £28bn.

support, logistics, and protection, with the danger that, because there are so few of them, each platform is too valuable and vulnerable to use. Many of these platforms are probably better seen as symbols of geopolitical aspirations rather than as useable weapons. But they are true Black Holes, as they run over budget their gravitational field sucks in money from all the small useful projects that get sacrificed to construct them.

Diversification suggests many “cheap and cheerful” general-purpose systems that can be used for a variety of roles. UK wars — the Falklands, the 1991 Gulf War, Iraq and Afghanistan — were largely “come-as-you-are-wars” using whatever equipment was available at the time, not equipment optimised for that type of conflict. Were

there enough money one might buy both. The US was once able to develop both the cheap F16, which has been mass produced, and the expensive F15. But there is now rarely enough money to do both, even in the US. Instead, there are calls for a combination of the “exquisite” and “expendable”.

SDR25 was conducted within a set of “parameters”. These were a total commitment to the nuclear deterrent; enhancing the UK’s contribution to NATO; reinforcing homeland security; supporting Ukraine; maintaining defence ties to the Indo Pacific region, the Gulf and the Middle East and delivering on the AUKUS partnership with the US and Australia. The government said “Within these parameters, the Review will consider the

need for prioritisation of objectives”.²² But these parameters themselves are unaffordable and unachievable. Trying to do everything means doing nothing effectively.

Buying weapons

There is a long history of weapons being delivered late, over budget and failing to meet requirements. A recent example is the Ajax armoured cavalry programme whose entry into service was halted in December 2025 because of danger to soldiers using the vehicle.

The Defence Industrial Strategy says the Government is clear that business as usual in defence procurement is not an option. Emerging technologies are changing the character of warfare and military power depends on how quickly the Armed Forces and industry can innovate and operationalise rapidly developing technology. But it says we are stuck in Cold

“The 2025 Strategic Defence Review was conducted within a set of “parameters”. But these parameters themselves are unaffordable and unachievable. Trying to do everything means doing nothing effectively.”

War-era procurement cycles and relationships with industry and “To meet the SDR vision for Defence by 2035, and maximise the economic growth potential of Defence, both government and industry must transform.”²³ But it does not say how this will be done.

Buying weapons is hard, partly because of the uncertainty about technology and threat, and partly because of the perverse incentives that get built into the contracting system, whether cost-plus or fixed price. My book on defence acquisition and procurement²⁴ was subtitled “how (not) to buy weapons” because of these perverse incentives.

Every review of procurement since Solly Zuckerman in the 1960s makes very similar recommendations, which are never implemented and appear in the next review. A common recommendation is to keep procurement staff in post for longer than the usual two years to enhance their skill. SDR25 says Senior Responsible Owners should remain in post for at least five years, without disadvantage to promotion²⁵. It does not say how this will be done. Promotion in the military depends on operational command, not sitting in a procurement office.

Other repeated recommendations are: to invest in technology demonstrators to show that the systems work before committing to the project, fly before you buy; avoid simultaneous development and production and changing specifications; cancel projects that do not meet time cost and performance targets to offset the conspiracy of optimism between buyers and sellers; and avoid varying production and quantities procured to fit into fluctuating budgets for short term affordability reasons.

People talk about a conspiracy of optimism, but there is no need to conspire. All the actors — politicians, military, civil servants and industry — have good reasons to under-estimate the cost and time required for the project and under-state the difficulties it faces. It is in their joint and individual interests to make the project look sufficiently attractive to get it into the plan and is an example of “motivated beliefs”; believing what is in



An AJAX Armoured Fighting Vehicle being tested at the Armoured Trials and Development Unit (ATDU) facility at Bovington. Photographer: Major C Bradford; copyright: UK MOD © Crown copyright 2024.

your interests to believe. If salary and promotion depend on believing that “this time will be different” then that is a good reason to believe it. Since all the principal actors share this optimism, they reinforce each other’s belief. The effect is strengthened if these beliefs will only be proved wrong many years later, when they have other jobs. This is partly the reason that so many reports complain that there is too little institutional learning from experience.

Conclusion

Finding examples of failure is easy. Of the 47 MoD projects in the 2025 Government Major Projects Portfolio, 12 were rated Red (successful delivery of the project appears unachievable), 27 as Amber (significant issues already exist) and only three as Green. Five were exempt from rating for security reasons. Finding examples of success is more difficult, partly because the failures on these “exquisite” major projects gets more attention than the successes on thousands of smaller contracts.

One area of success is procurement for urgent operational requirements (UORs), where the urgency of these purchases prevents the normal acquisition process from being followed. Instead, time gets priority, rapid procurement is possible, and often costs are lower because there is less “gold plating”. UORs have been widely used to support Ukraine. A dedicated unit, Taskforce Kindred, was established in 2022 to coordinate and rapidly deliver significant military aid, equipment, and training to Ukraine’s Armed Forces, focusing on fast-tracking supplies from UK stockpiles and procurement, including drones, anti-air systems like Raven, and ammunition, while also fostering long-term defence industrial ties.

A factor in the success of support for Ukraine is that it is financed out of the Treasury Reserve rather than the MoD budget, reducing the inter-service rivalry that has plagued formulation of the Defence Investment Plan. Successes include Project Octopus a joint UK-Ukrainian rapid development of a cheap drone interceptor and the procurement in record time from Sweden of the 14 Archer

artillery systems to replace the 32 AS90 guns gifted to Ukraine²⁶. A longer-term solution for the British Army's Mobile Fires Platform requirement is the RCH 155, mounted on to a Boxer armoured vehicle, being procured jointly with Germany. The Defence Industrial Strategy gives the example of how a flexible portfolio management agreement with MBDA, a pan European missile consortium, enabled MoD to rapidly meet UORs from Ukraine.²⁷ While Support for Ukraine does generate employment²⁸, it is a success because the choices are driven by military needs rather than the growth agenda. The defence industrial strategy is more likely to be a success if it is also driven by military needs rather than the growth agenda.

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The Next Generation Fighter Aircraft: A European Dilemma?

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THE UK and Europe are developing two similar types of combat aircraft, namely the UK Tempest and the European Future Combat Air System (FCAS). The Tempest will start to replace the Eurofighter Typhoon from about 2035. Tempest is a sixth-generation fighter aircraft incorporating advanced technologies such as AI and stealth. In December 2022, it became the Global Combat Aircraft Programme (GCAP) and an international partnership between the UK, Italy and Japan, with the first flight of a demonstrator planned for 2026-27. The three partners in Tempest have named the joint venture 'Edgewing' and they will have equal shares in the joint venture which is based in Reading, UK. There will be international consortia for the engine and electronics. Currently, estimated production is between 290 and 350 units, without exports.

The Rivals

The European rival is the French-German-Spanish consortium of Dassault, Airbus and Indra Sistemas developing the Future Combat Air System (FCAS), also known as the Next Generation Weapon System (NGWS). This was launched in 2017 to replace the Rafale and Typhoon by 2040; it will be nuclear and carrier

capable. The first flight of a demonstrator is planned for around 2027. Dassault is the prime contractor and Airbus will develop the drone carrier. Already, there have been disagreements between Dassault and Airbus over the prime contractorship, work sharing, intellectual property and the aircraft's operational role with a French requirement for a nuclear and aircraft carrier role; such disagreements continued to March 2026. Possible solutions to the disagreement include an independent German development of a fighter aircraft, German withdrawal from the programme and German membership of the GCAP (Tempest) programme which will be explored below.

The USA is developing a rival aircraft, the F-47, next generation, sixth generation or Next Generation Air Dominance programme to replace the F-22 Raptor. It will be an air superiority fighter with advanced stealth capabilities and a possible buy of 185 to about 200 units. First flight is scheduled for 2028, operational by 2029 and a programme development cost of \$20 billion. It will be built at the St Louis Missouri plant. A cheaper rival is the US F-35 aircraft already in service and available for purchase but at a much lower technology level.

UK TEMPEST AIRCRAFT	SOME BENEFITS
Tempest: Jobs per annum (direct, indirect, induced).	21,000 jobs.
Effects on productivity.	78% higher than national average.
Location.	Jobs mainly in NW and SW regions.
Wider economic benefits.	Skills and R&D spillovers; regional development. Exports not included in estimates
FCAS AIRCRAFT	
France only: direct, indirect, induced.	43,000 jobs.
Four nations (France, Germany, Spain, Belgium): direct, indirect and induced.	125,000 jobs.
Other benefits.	Additional gross value added; tax return; technology spillovers.

The Options for the UK

The UK can proceed with its Tempest programme or purchase a European rival such as the FCAS or the US F-47; it could also opt to buy more US F-35 aircraft. The advantages of the US F-35 is that the aircraft is operational, the UK already employs the F-35B and has ordered F-35As whilst its rivals are ‘paper designs’ and sixth generation fighters. The choice between the aircraft can be made using cost-benefit analysis or other methods of project appraisal (such as real options analysis).

Some of the elements of a cost benefit analysis for the Tempest and rival FCAS projects are shown in Table 1.1 For the Tempest, UK jobs, productivity, some regional impacts and wider economic benefits are shown. The jobs impact of the FCAS for France only and over four nations are also shown. The France-only data are taken as the equivalent of the UK so that comparisons can be made with the UK data; but the output numbers are not on a comparable basis.

Output determines unit costs. For Tempest, output estimates range from 290-350 units. For FCAS there are some output estimates ranging from lower

bound figures of 200-300 units to upper bound figures of 250-600 units and a mid-range estimate of 465 units².

Continuing controversy about the FCAS and future European defence policy raises questions about the economic sense of Europe developing two similar types of combat aircraft. European defence policy aims to strengthen its defence industrial base by reducing duplication and fragmentation. For example, there are too many different types of defence equipment produced at a small scale so failing to exploit scale economies. The Tempest and FCAS projects are classic examples of European duplication. What might be the economic case for merging both projects and building one European combat aircraft?

A merger of the two combat aircraft projects?

Cost savings are a major economic case for merging the two projects. Output is a major determinant of unit costs, both unit total costs and unit production costs. The immediate economic benefit of a merger would be cost savings from a larger output. The fixed costs of development would be shared over a larger number of



Tempest is a sixth generation fighter to be produced in partnership between the UK, Italy and Japan.

partner nations. Six nation states would share development costs compared with three nations without a merger. Also, there would be economies of scale and learning from the larger output of a six-nation programme. A six-nation programme might double output from, say, 300 units to 600 units which would lead to learning economies of some 5-10% in unit production costs. Cost savings might be even greater if the merged project leads to more exports.

But we cannot assume everything remains unchanged with the merger. Total development and production costs might increase with more partner nations. There are likely to be cost penalties with more nations added to the club. A six-nation collaboration would be large number of partners for a combat aircraft. Eurofighter Typhoon involved four equal partner nations so a six-nation collaboration is a significant increase and would likely increase total development and production costs, but questions arise about how much would costs increase? There is a precedent: the Airbus A400M airlifter is a collaboration involving five major buying nations (France, Germany, Spain, UK,

Turkey), so there is previous experience of a large international collaboration approaching a six-nation partnership. However, this partnership has not been problem-free. There have been problems with the A400M airlifter involving its engine and gearbox, cost overruns and delays in delivery.

Numbers of aircraft ordered might be a problem with questions about the economic viability of a three-nation project. But a six-nation collaboration means more national orders (600 versus 300 units). There are also precedents on the size of national orders. The UK supported the development costs of three separate designs for its V-bomber fleet with a total order of over 300 aircraft so that national orders for some 600 units from a six-nation project becomes more economically viable.

Challenges for a Six Nation Collaboration

A six-nation project would still be an 'Augustine' weapons system. These are very costly high technology projects produced in small numbers with high unit costs meaning that they are almost too costly to lose in conflict! Even more so against cheap drones which have

revolutionised the economics of warfare. Named after Norman Augustine, who became Lockheed Martin's President in 1995, he famously forecast that by the year 2054, the entire US defence budget would purchase just one aircraft.

A six-nation project also raises questions about controlling the costs of such an international partnership. More partners mean greater pressure to increase both development and production costs. Each partner nation will demand its own flight-testing centre and a national production final assembly line. Similarly, each partner will have its national monitoring arrangements which will need to be duplicated so further adding to costs. None of these problems are necessarily sources of cost increases. There are measures which can be taken to mitigate pressures to increase costs from more partner nations. For example, not all partners might be treated as prime contractors: it might be agreed that there be only two primes. Also, equity in work sharing can be achieved through sharing production work with say, one partner manufacturing all wings or other parts of the aircraft. The relevant point is to achieve cost efficient work sharing between all partners and to avoid inefficient work sharing. In other words, the model of an efficient international collaboration requires the creation of partnerships which closely resemble the single prime contractor model. The aim is to avoid creating a producer group which maximises costs and cost increases. All too often, collaborative projects are characterised by rising costs and delays.

The Buy American option

The UK might consider buying a US combat aircraft and there are at least two options, namely, the new F-47 or the F-35 aircraft. The F-47 is the modern-equivalent

of the F-22 Raptor aircraft: the latest all singing and dancing top of the range combat aircraft. But it will be costly, with unit costs probably at three times the unit cost of the F-35, say, some \$300million. There might be a work sharing package on the F-47 similar to the UK work sharing on the F-35. The F-35 is much cheaper but is not a sixth-generation fighter like the F-47. Also, a US buy would involve import costs.

Conclusion

A six-nation partnership for Europe's future combat aircraft project is an attractive and economically viable project. It would reduce duplication and would attract increased export orders. It would also demonstrate that Europe is serious about coordinating its defence policy and avoiding fragmentation and duplication of national defence orders. But France might be a barrier in the form of the Dassault company.

Here, a possible solution would be the formation of a joint BAE/Dassault company similar to the arrangements for the Anglo-French Jaguar aircraft. This was a 1960s aircraft originally conceived as a jet trainer which eventually became a strike aircraft manufactured by SEPECAT, a joint venture between the French company Breguet and BAC, the British Aircraft Corporation. Breguet was subsequently acquired by Dassault in 1971. On this basis, and experience with Concorde, there is a precedent for Anglo-French cooperation at both the Government and industrial levels.

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For those in peril on the sea: the dilemmas of asymmetric warfare

Peter Spayne

ONE of the more interesting questions emerging from the current confrontation with Iran is not simply whether Western forces can defeat the drone-air threat technically, but whether western naval operating culture has drifted into the same mindset that caused massive Russian naval losses in Ukraine.

Through open-source media it can be observed with a trained eye that Iran is fighting an air war like Ukraine; they are leaning on massed drones and decentralised strike systems to place overwhelming pressure on high-value and high PR targets. What this means is that western attacking forces, potentially including the Royal Navy should *HMS Dragon* join the fray, are fighting like Russia at sea. By relying heavily on a small number of expensive, high-visibility platforms in littoral waters, that carry enormous strategic and political risk if they are lost. Fighting like a Russian is not necessarily a bad thing; the question is though: is America fighting like Russia in 2022, or Russia in 2026? What does that mean for the UK?

Iranian drone warfare today looks strikingly similar to the tactics Ukraine adopted to repel Russian threats from sea. Both nations in that conflict rely heavily on inexpensive systems sometimes classed as loitering munitions¹ such as the Shahed family of weapon systems, or locally

produced clones of similar tech, which, while rudimentary, can carry modest warheads and become dangerous when launched in large numbers. The strategic logic behind these systems is simple: they are cheap and used in huge numbers to overwhelm and expend conventional air defence by attrition alone. Rather than relying on a single decisive strike, the attacker (or defender depending on your viewpoint) launches large, low, slow, drone salvos to saturate defensive systems, forcing them to expend their small stock of exquisite interceptor missiles (originally designed to fend off ballistic missiles or shoot down fighter jets) with the eventual result that some percentage of the barrage will get through.

Over the last few years lessons have been learned; rather than attempting to intercept every incoming drone with high-end missiles, Russian and Ukrainian forces have constructed a ground based layered defensive ecosystem built from a mixture of electronic warfare, anti-aircraft guns, interceptor drones and short-range missiles. This approach deliberately inverts the cost equation. Cheap threats are countered with relatively cheap defensive tools wherever possible, preserving expensive systems for the most dangerous incoming targets.

Iran and neighbouring Gulf states appear to have absorbed and applied many of the same lessons here in defence and



*HMS Defender firing its Sea Viper missile.
(Photographer: LPhot Pepe Hogan; Copyright:
UK MOD © Crown copyright 2021.)*

counterattack. The Iranian drone arsenal and industrial base is estimated to be huge, facilitating the evolution of a strategic strike capability without relying on traditional air power. Tehran is still able to project force using large numbers of weapons launched from land or dispersed platforms. The result is a form of warfare that is financially imbalanced. Iran risks very little financially or politically when a drone is destroyed, but Allied Naval forces risk significant cost and embarrassment if even one weapon gets through.

The attack on Akrotiri

A small detail from recent reporting illustrates the point rather well. The incident at RAF Akrotiri in Cyprus reportedly involved a single drone striking a hanger. Taken at face value, that is

operationally unusual. In the doctrinal playbook of drones, developed through both Russian and Ukrainian drone operations, and copied by Iranian proxies, attacks are almost never conducted with a solitary system. Shahed-style weapons are designed to be launched in groups precisely because their effectiveness relies on numbers. Multiple drones are typically sent along slightly different trajectories in order to dilute radar coverage and force air-defence operators to make rapid engagement priority decisions.

A lone drone is therefore something of an anomaly within the established pattern of employment. There are several possible explanations. It could have been a reconnaissance probe intended to test radar coverage and reaction times before a larger strike. It could have been a navigation failure within a larger wave. Or it may simply have been an opportunistic launch rather than a coordinated attack. But the episode still illustrates how the

threat environment has shifted, with a single crude drone penetrating deep enough to create headlines and raise uncomfortable questions about western defensive postures.

Public opinion appears to have disregarded the question of where Akrotiri's ground based air defence was for the moment and concentrated instead on the noticeable lack of Royal Navy presence, especially given the assumed utility of the Type 45 Air Defence Destroyer. Western naval doctrine still revolves around relatively small numbers of extremely capable and extremely expensive ships. A Type 45 destroyer represents an extraordinary concentration of capability: advanced SAMPSON MFR Radar, x48 ASTER air defence missiles and command facilities capable of controlling a vast battlespace. But it is also a limited billion-pound asset that carries immense symbolic weight. The destruction of such a ship would instantly become a global political and media event.

This dynamic has historical precedent. One of the defining naval moments of the Ukraine war was the sinking of the Russian cruiser *Moskva* in 2022 after being struck by Neptune sea skimming missiles while being distracted by USVs in the black sea. Following this successful raid Ukraine used relatively modest anti-ship missiles, UAVs and USVs to sink and damage a wide range Russian Frigates before a change in Russian tactics removed the opportunity. The loss of a large, iconic warship demonstrated that modern rudimentary weapons could destroy major naval assets with ease and instantly dominate the global narrative of a conflict.

The imagery of war

The informational dimension of warfare has grown even more powerful since then. Modern combat is fought across the social media environment to weaponise opinion.

Images and video circulate instantly and shape perceptions of success or failure far beyond the physical scale of the event itself. The United States still understands the power of highly visible naval destruction. That dynamic was evident again only days ago in the Indian Ocean. On 4 March 2026, a US Navy attack submarine fired a Mark 48 torpedo that struck and sank the Iranian frigate *IRIS Dena* in international waters roughly 40 nautical miles off the coast of Galle, Sri Lanka. The ship, which had recently taken part in an international naval exercise hosted by India, went down after the

Western naval doctrine still revolves around relatively small numbers of extremely capable and extremely expensive ships.

torpedo impact, killing at least 87 sailors while 32 survivors were rescued by Sri Lankan authorities.

Footage of the event quickly acquired a public dimension. The US Department of War released footage of the attack showing the torpedo strike and the violent explosion that followed beneath the hull of the Iranian vessel. The images circulated widely as the broader conflict between the United States and Iran expanded beyond the Middle East into the Indian Ocean.

The important point is not the mechanics of those engagements but the informational effect. Naval combat is uniquely visual. A burning warship produces images that travel around the world instantly and carry enormous psychological weight. The sinking of *Moskva* illustrated how quickly such imagery can reshape the narrative of a conflict.

“The absence of a British Type 45 destroyer does not necessarily reflect weakness or incapacity. It may instead reflect a very rational appreciation of the physical and political risks attached to deploying a highly visible and highly capable – but limited – asset”

The back seat fleet

Russia appears to have drawn a lesson from that event. Since the loss of *Moskva*, the Russian Navy has largely kept its major surface combatants well away from the Ukrainian coastline. Rather than risk additional high-profile losses, Russian doctrine in the Black Sea has shifted toward operating at greater distance, relying on aircraft, drones and land-based missile systems to project power while keeping its most visible platforms out of the most dangerous engagement zones. The reasons are no great secret, just simple maths: 48 missiles can only offer a defence for so long against 400 drones. The Russian fleet still exists, but it is cornered from the fight, deliberately being preserved rather than risked.

That pattern is obvious when observing Western naval deployments in environments where drone and missile saturation is a credible threat. The absence of a British Type 45 destroyer in certain theatres feels, superficially, reminiscent of the Russian approach post *Moskva*. This does not necessarily reflect weakness or incapacity. It may instead reflect a very rational appreciation of the physical and political risks attached to deploying highly visible and highly capable – but limited – assets into environments where huge numbers of crude weapons can produce overwhelming effects. The ships are capable of shooting down enemy drones (although their defences were designed with higher, faster missiles in mind), but

faced with incoming ordnance by the thousand, it's only a matter of time before they take a hit.

The dilemma facing modern naval planners

If a warship is not deployed into a contested environment, the political cost may be criticism for caution or a perceived lack of commitment. Yet if a warship is deployed and then lost in a sea of fire – broadcast to the world via Sky News – to a barrage of relatively inexpensive weapons, then the mass loss of life, and political damage, will be far greater.

In that sense the comparison between Iran and Ukraine becomes revealing. Both actors rely heavily on distributed strike systems designed to erode the advantages of larger conventional forces operated by both Russian and Western Navies. Iran and Ukraine accept the loss of individual drones or missiles as a routine cost of operations. The side using cheap weapons en-mass can afford to lose them all if needs be in pursuit of a single successful strike. However, the side operating billion-pound warships cannot make the same calculation.

None of this means that modern destroyers are obsolete or incapable of defending themselves. Ships like the Type 45 remain among the most capable air-defence platforms ever built, equipped with sophisticated radar and missile systems designed to intercept large numbers of aerial threats. When operating

as part of a task group with layered air defence and electronic warfare support they are extremely competent combatants. The difficulty of saturation emerges when those ships operate within reach of large numbers of low-cost weapons. Even highly capable systems have limits to the number of targets they can engage simultaneously and the number of missiles and bullets they can carry at once.

To the broader strategic question. If Iran has learned from Ukraine how to wage asymmetric drone warfare, Western navies must ensure they are not unconsciously drifting into the role Russia occupied in the early years of their conflict: defending a handful of high-value platforms against waves of cheap systems designed to expose vulnerabilities. Whether that dynamic explains particular deployment decisions is impossible to determine from outside government planning circles. But the strategic dilemma is increasingly clear. In the era of drone warfare and distributed strike systems, the greatest risk to a modern warship may not simply be its physical loss, but the narrative shockwave that follows. Iran has backed Western

governments into a corner. Refuse to send a warship to certain peril and the accusation becomes weakness or retreat. But send one and risk something potentially worse: a billion pound UK mass casualty event burning on the front page of every newspaper after being hit by the kind of cheap systems shaping the conflict. Politically, either outcome carries the scent of failure. In that sense the strategy is quietly effective. Far from the battlefield itself, Iran has engineered a situation in which Western governments are forced to wrestle with a no-win decision. Commit political suicide by not showing up or commit political suicide by showing up and losing in full view of the world. Either way, the pressure is no longer military; it sits squarely inside Western political decision-making.

ENDNOTES

1. The Shahed-136 is commonly classified as a loitering munition, though some analysts describe it as a “one-way attack UAV.” Loitering munitions are unmanned systems launched like drones that carry a warhead and destroy themselves on impact with a target. The Shahed-136 fits this definition because it is an expendable UAV designed to strike targets by self-detonation. However, unlike many traditional loitering munitions that circle and search for targets using onboard sensors, the Shahed-136 typically flies to pre-programmed coordinates using GPS/INS guidance, meaning it sometimes behaves more like a slow, low-cost cruise missile. It is often described as a system that blurs the line between loitering munition and cruise missile in modern military classifications. For this reason the Shahed is often referred to as a ‘One-Way-Attack-Drone’, avoiding categorisation as a loitering munition or missile.

**Both actors rely heavily
on distributed strike
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Navies.**

Sinking the third component of the Royal Navy's fighting power

James Prichett - Deputy Director of the War Studies Research Centre, University of Hull.

Introduction

As the influential writer on strategy, Colin S. Gray wrote, “Bad times always return”. Russian naval regeneration, American reticence toward European security, and even China's burgeoning assertiveness at sea have been brought into relief in recent pronouncements and events including the UK's Strategic Defence Review and Pete Hegseth's address to NATO in the summer, and December's US National Security Strategy and the cruise of the Russian intelligence ship *Yantar*.

To meet the return of the bad times, the Royal Navy must think seriously about threats and generate good ideas about how and by what means to contend with them. Such ideas emanate from the Naval Staff, whose duty it is to balance internal and external demands and resource constraints, whilst generating and executing ideas about how to handle such problems. A wave of continuing reforms generally packaged as ‘Warfighting Ready Plan 2029’ is the Navy's current idea, spearheaded by the First Sea Lord, General Sir Gwyn Jenkins. It covers new concepts like ‘Atlantic Bastion’, ‘Atlantic Shield’ and ‘Atlantic Strike’. These things may well bolster the Navy's overall fighting power, but, in the view of this observer, an important element of the Navy's ‘fighting power’ may be being impaired.

The Navy, like the Army and Air Force, thinks about ‘fighting power’ as comprising three components: ‘physical’ (weapons, equipment, manpower &c.), ‘moral’ (motivation, culture, ethics, &c.), and ‘conceptual’ (doctrine, learning, strategic analysis). This conceptual shorthand helps the Royal Navy consider the many complex dimensions of war and

aspects of sea power and maritime security. The ‘Warfighting Ready Plan 2029’ is strong on the physical component, pursuing industry partnerships and procuring new weapons and equipment such as uncrewed systems; the Royal Navy seeks to create a ‘more lethal, integrated’ ‘Hybrid Navy’. General Jenkins has also personally addressed moral aspects concerning promotion, ‘toxic leadership’ and morale at his First Sea Lord's Conference with senior officers.

But among this wave of reform, it is important to not lose sight of the conceptual element of fighting power, lest the Navy equip itself with platforms ahead of the evolution of doctrine. Leadership reform must, along with behaviours and actions, also ensure that the conceptual-intellectual aspects of fighting power are robustly protected. The loss of the Royal Navy Strategic Studies Centre (RNSSC), in this regard, seems like a misstep for the service which needs to advance the ‘conceptual component’ now more than at any time in the last 35 years.

The Royal Navy Strategic Studies Centre (RNSSC)

Established in December 2019 by then Admiral Tony Radakin, the RNSSC functioned as the Naval Staff's in-house ‘think tank’, its express purpose being to develop the conceptual component of fighting power, whose mission was to ‘inform the Royal Navy's policy and strategy decisions’ and so keep ‘ahead of our adversaries in terms of conceptual thought as well as delivery on operations’. To this end it provided the Navy with a dedicated forum for serious, rank-

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agnostic, open inquiry and strategic debate among officers. It also provided an institutional bridge for external engagement in national debates about sea power and maritime security and intellectual connections with organisations like the Army's Centre for Historical Analysis and Conflict Research (CHACR) and RAF's Freeman Air and Space Institute (FASI), allied forces' counterparts, civilian academia and think tanks like the Royal United Services Institute (RUSI) and Council on Geostrategy – with whom its researchers published.

The RNSSC's small team of five permanent staff delivered 'bang for buck', with a small operating budget compared to the Navy's capital expenditure of billions. Its intellectual pursuits and 'outputs' were many and varied, with researchers publishing public articles in fora like *The Wavell Room*, *The Broadside*, and *CIMSEC*; it undertook a joint Podcast series with *Mariner's Mirror*, visiting fellowship programmes with Five Eyes allies, and worked alongside its Army and Air Force counterparts to promote multi-domain thinking. The RNSSC also sponsored workshops at a range of institutions, and represented Royal Navy thinking at conferences across Europe, the Americas and Australasia. Its staff hosted monthly lectures for an internal audience and liaised with think tanks for external policy research. In 2024, it published an edited volume – *Maritime Britain in the 21st Century* – launched at a private breakfast in the Houses of Parliament; a clear strategic communications campaign

speaking direct to policy makers at the heart of government and much else besides.

This diverse intellectual activity fostered serious study of strategic challenges of sea power and strategy – technical, historical and theoretical, with academic rigour and integrity; it did this not just within the Naval Staff, but across the service's intellectual environment. Its independent team could also take a longer, more considered look at maritime strategic problems in an era where thought is increasingly constrained by operational tempo and the pace of demand for tactical, naval 'outputs'. Providing knowledge about the Navy, to the Navy, on things the Navy should be interested in was, then, its key role, but importantly it did so from an internal, expert, and institutionally benign position *within* the Navy, rather than as an external organisation with separate, potentially rival, interests – whilst still serving as a bridge beyond the Navy. This allowed it to raise difficult but essential questions to the Navy's leadership and disagree from a position of trust – and with security clearance unavailable to external partners and commentators. The centre thus helped to institutionalise the Navy's *self-awareness*, *self-reflection* and *self-critique* – key elements for learning and adapting among military forces.

What is Lost

Nevertheless, those following the RNSSC online may be concerned to note the disappearance of its webpage from the Navy's home site. On LinkedIn, it was first replaced with the 'Naval Staff Research Team' and then disappeared from that platform, with a hint to look for its activities at the general Royal Navy page instead. In short it has been disestablished. Were this retreat from social media only cosmetic we might suspect the new 'Research Team' as only a downgrade, from in-house engine for genuine reflection and thought, to research support. But the deletion of the RNSSC in total and subsummation under the principal Royal Navy banner suggests its services are 'no longer required' and the

telos of the RNSSC, in this mode of think-tank-bridge, is to be lost or diffused, blunting the conceptual component of the Navy's fighting power.

Without an obvious replacement this appears an unwise loss to the Navy's capacity for self-reflection, open discussion and inquiry and intellectual engagement with other institutions and the public, particularly at a time when institutional thinking about strategy needs to be built up to meet the return of bad times – rather than be run down or retired. A dedicated pool of thinkers is obviously valuable for thinking about war, and for reference neither the Army's nor the RAF's centres for strategic thinking seem to be going anywhere. Indeed, the co-director of the RAF's FASI (and RNSSC Visiting Fellow), Dr Sophy Antrobus, has recently been ennobled. Important external sources of critique do exist (in think tanks, academia, and the wider realm of the MoD) and the Naval Staff retains other organisations within itself for reflection, but the loss of the RNSSC reduces the service's capacity for wider engagement and thus fewer bulwarks against confirmation-bias, group-think, and other organisational maladies that hinder strategic thought.

Moreover, does the loss of this secure but academically open and public-facing forum for disagreement impair, contra the First Sea Lord's noble intent – service culture?

We can hope that the RNSSC's farewell post on LinkedIn suggests its work will continue elsewhere within the Naval Staff's Strategic Plans department, and the Operational Advantage Centre, for example – but likely in a more diffused way and with less of the bridging function with wider academia, and particular focus provided by the RNSSC. Such work depends, as always, on an organisational culture of open critical inquiry in strategy and history, time to study and think, and willing individuals to

undertake and support such endeavours. British commentators have pointed out the necessity of developing such organisational cultures but that our services retain serious hang-ups towards scholarship that the RNSSC's activities played a role in mitigating. Here the Navy's obsession with tempo, the 'pace of threat, the pace of technological change', efficiently packing officers' time and producing 'outputs' at speed exacerbates the lack of time available for reflection, discussion and learning – a common enough complaint among civilian academics involved in military education. But the undeniable need for efficiency and meeting the challenges of war's accelerations can be appreciated without jettisoning diligent study. Quickly producing bad ideas is worse than useless and the RNSSC provided a temporal advantage in this regard by enjoying the time and space to indulge in purposeful curiosity, questioning

assumptions and challenging orthodoxies against the need for speed in time-sensitive staff-work.

Conclusions

This has not been an argument for the intellectualisation of the practical

business of sailing and fighting. Only that with the apparent loss of the RNSSC we should be concerned that the Royal Navy is further losing its grip on the conceptual component of its fighting power. More must be done to foster an environment that, over the course of a career, sees more engagement with the theoretical and historical, not just in preparation for staff college, and building a Navy-wide learning organisation. An obvious part of the solution seemed to be a dedicated organisation for maintaining open intellectual inquiry, bridging to wider academia and public debates. Without it, who is guarding that conceptual bridge for the Royal Navy's fighting power?

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