The future of amphibious operations

The planning guidance issued in July 2019 by the then-new commandant of the United States Marine Corps (USMC), General David Berger, is a road map for the service’s force development and spending over the next four years; it is also one of the most striking defence-planning proposals to have emerged recently from the upper echelons of the US armed forces. It can be understood as an attempt to answer questions over how the US military should adapt to a world of renewed great-power competition and the challenge posed by the rise of China, but critics wonder whether its aims are achievable.

The USMC is a naval expeditionary force specialising in amphibious operations – projecting ground forces and air power into hostile territory from the sea – and has traditionally relied on large naval platforms to deliver significant formations of landing forces ashore. If implemented, the planning guidance would radically alter the practice of the US marine’s core business, amphibious warfare. The service is already in the midst of a transition: having spent two decades as, in effect, an adjunct to the US Army in its counter-insurgency campaigns in Afghanistan and Iraq, it is now reassessing its traditional role of supporting the US Navy, which is operating in a new, more contested maritime environment.

The impetus for the shift away from large platforms is the development, particularly by China, of anti-access/area-denial (A2/AD) capabilities using precision long-range missile systems to threaten rival military assets that previously would have been out of range. The A2/AD challenge is acute for forces operating in littoral waters, which is why, in General Berger’s view, ‘visions of a massed naval armada nine nautical miles offshore in the South China Sea ... are impractical and unreasonable’. His plan calls for the development of more dispersed, agile formations capable of operating within an enemy’s A2/AD ‘bubble’. In a concept that the US Marines are calling ‘expeditionary area-base operations’ (EABO), these formations could set up area-denial bubbles of their own by rapidly establishing footholds on remote islands as bases for anti-ship cruise-missile and artillery-rocket systems, redeploying as needed. Although traditional platforms would still have a role supporting these new forces and the EABO concept – and they would be needed to deliver large-scale forces ashore after A2/AD threats are mitigated – General Berger has been clear that acquiring new capabilities will mean sacrificing some of the previous ambitions for a greater number of large, expensive amphibious ships. These will still have a role, but his view is that the fleet design of the future should be composed of ‘the affordable and plentiful at the expense of the exquisite and few’, comprising ‘smaller, more lethal, and more risk-worthy platforms’.

Storming the beach
There is a long history of nations attempting to land forces from the sea to project power or outflank an enemy’s army. Assault from the sea has always been one of the more demanding, complex and potentially risky military operations. The forces required to perform such manoeuvres are among the most specialised and costly to maintain.

The development and strategic impact of amphibious assault reached its apogee in the twentieth century. The risks involved were vividly demonstrated in 1915 in the Gallipoli campaign, which began as a bold effort to unlock the stalemate on the Western Front with an amphibious assault in the Dardanelles. The assault foundered due to poor execution and a lack of proper equipment. In the Second World War, the USMC pioneered modern techniques of amphibious assault on a dramatic scale in the Pacific theatre. That conflict also produced history’s most ambitious amphibious operation, the Normandy landings of 6 June 1944, known as D-Day.

During the Cold War, the US and the United Kingdom – the latter with its own long tradition of ‘sea soldiers’ in the Royal Marines – further developed their amphibious capabilities as key elements of their overall force structures. These included ever larger, more sophisticated and more capable platforms, and eventually featured the use of aviation assets to deliver well-equipped forces on land. For the UK, these forces became a valuable ‘fire brigade’ capable of responding to various post-imperial contingencies. Following the UK’s withdrawal from east of Suez in the early 1970s, the Royal Marines were repurposed as a specialist force deployed to Norway to reinforce NATO’s northern flank, and in 1982 played a critical role in the amphibious assault to retake the Falkland Islands following their invasion by Argentina.

The USMC made an opposed landing at Inchon during the Korean War, and, in the First Gulf War, the presence of a sizeable US-led amphibious force offshore assisted in the effort to pin down Iraqi units in Kuwait (although it was judged to be too risky to land the force). Military planners have been engaged in a long-running debate over whether large-scale opposed landings will ever again be undertaken, given the risk of high casualties and the decreasing political and public tolerance for incurring them. Modern operational doctrine has focused on inserting forces deeper inland where possible; but traditionalists question whether these forces can be supported adequately, given that heavy equipment cannot be delivered by air, and point out that such an approach may raise, rather than lower, the risk of casualties.

Amphibious forces have been active since the end of the Cold War, but not in carrying out traditional beach landings like D-Day, Inchon or the Falklands (although Russian forces carried out a limited assault in their conflict with Georgia in 2008). Instead, they have been engaged in a variety of limited interventions, including civilian evacuations, and other lower-risk contingencies such as disaster relief. With a growing proportion of the world’s population concentrated in coastal regions, including in potentially unstable and insecure mega-cities, the ability to insert small forces ashore and withdraw them quickly has an enduring, even growing attraction. This has raised questions about whether the limited utilisation of amphibious platforms justifies the expense of maintaining the capability for large-scale force movement. Even the US has begun deploying some lower-end, less capable ‘sea-basing’ platforms derived from commercial ship designs to perform certain maritime-security missions at lower cost. For example, the Lewis B. Puller-class of expeditionary sea base is essentially a heavily modified tanker able to carry small groups of US marines or special forces, and includes mine countermeasures and other capabilities to support counter-piracy, humanitarian-assistance and other missions.

Europe
As the post-Cold War maritime focus has switched from classic sea control towards power projection, several European states have made significant investments in
amphibious shipping along these lines. Some of the more notable new European warships are large amphibious vessels, including Spain’s Juan Carlos I and the French Mistral-class amphibious helicopter carriers. These ships have so far participated in limited-contingency missions, including civilian evacuations from Lebanon in 2006, the 2011 Libya operation, and transportation of equipment for coalition counter-terrorism operations in the Middle East. Last year’s BALTOPS exercise in the Baltic Sea focused on NATO’s amphibious forces and on new, more flexible tactics, similar to those proposed by General Berger. However, it is unclear whether these forces will have a substantial deterrent effect against Russia, given its robust A2/AD capabilities.

The UK’s Royal Marines are aiming to transform themselves by 2023 into a so-called Future Commando Force – characterised by a more geographically dispersed, agile force structure – that would theoretically be able to carry out raiding and disruption missions within an A2/AD environment. These changes mirror General Berger’s vision in some ways, though on a smaller scale. They feature a greater number of small detachments dispersed on ships around the fleet, and in different regions, so that they are on hand to respond quickly in a crisis. The UK forces will probably be lighter than the new formations envisaged by the US marines and would complement them in something close to a special-forces role.

**Indo-Pacific**

The shifting power balance caused by the rise of China is driving the proposed transformation of the USMC’s force structure, but it is also significant that smaller states in the Indo-Pacific are behind some of the most interesting amphibious-force developments globally.

Each state has a different priority and level of ambition for its amphibious capabilities, ranging from modest needs such as transporting and positioning military and other assets to actual combat capability. Given the vast, archipelagic nature of the region, featuring long coastlines and multiple, contested territorial and maritime claims, it is a major strategic asset to control large-volume, multi-purpose vessels capable of landing forces ashore.

In China, the growth of the People’s Liberation Army Navy (PLAN) Marine Corps in the last five years from approximately 10,000 personnel to upwards of 25,000, alongside significant platform acquisitions, has expanded its capacity to conduct expeditionary amphibious operations in the South China Sea and potentially beyond. The PLAN Marine Corps has invested in notable amphibious ships, sized at 20,000 tonnes full-load displacement, and has just launched its first large-deck amphibious carrier, comparable to the US Navy’s largest amphibious ships, the USS Wasp class. These platforms can clearly fulfil the role of influencing and coercing China’s regional neighbours, including Taiwan, and can support Chinese interests further afield. Looking ahead, it is unclear how Beijing, which has been building its amphibious forces and particularly its amphibious shipping on a classic US model, will adjust its force planning and acquisitions should the US alter its model along the lines proposed by General Berger.

Australia, Japan and South Korea have all been investing in new amphibious capabilities to be able to deploy forces over long distances. Japan plans to use its forces to defend its southwestern islands. The Royal Australian Navy recently used its amphibious ships effectively in order to evacuate civilians from areas endangered by bush fires. Smaller regional navies like those of Indonesia, the Philippines, Singapore and Thailand are also investing in the acquisition of amphibious platforms and forces, albeit mainly with small-and medium-sized vessels, for military missions and also for an increasingly significant role supporting humanitarian-assistance and disaster-relief missions.

**Outlook**

The character of amphibious operations, which once pursued the narrow objective of landing forces on beaches, has diversified substantially, as have the states seeking amphibious capabilities. It is unclear whether, even if the USMC succeeds in making fundamental revisions to its force structure and operational concepts, others will follow its lead. The UK’s Royal Marines appear to be adapting in a complementary way. China, mindful of a possible future mission to mount an amphibious invasion of Taiwan, is likely to choose to retain a significant combat
landing capability, at least for that specific contingency.

General Berger’s sweeping proposals are likely to provoke bureaucratic resistance and political scepticism, making them difficult to implement. A key to success will be demonstrating the ability to introduce new capabilities and technology more quickly and efficiently than in the past. For instance, the marines began conceptualising the Expeditionary Fighting Vehicle – intended to launch amphibious assaults starting 25 nautical miles from shore – in 1988, awarded an engineering contract to General Dynamics in 1996 to build the vehicle, but cancelled the acquisition in 2011 after years of design problems and cost overruns.

In the context of the US armed forces, the marines are often referred to as the neglected, ‘Cinderella service’. However, their active strength of approximately 185,000 exceeds, for example, the total active armed forces of the UK, which have fewer than 150,000 personnel. If the USMC has been struggling to address the A2/AD challenge posed by its adversaries, and General Berger’s vision is meant to underline some of the stark choices it may face, the challenge will be all the greater for other nations with amphibious forces operating on a fraction of the United States’ defence budget.