



Corbett and Air-Sea Battle: How the Joint Force can Maintain Access using the “Fleet in Being” Concept

By Maj. Matthew Prescott

Access to geographic areas and resources around the world is a major concern for competing states and wars have been won or lost based upon a state's ability to maintain these areas and resources or deny them to an opponent. With the United States' "pivot to the Pacific" policy and the importance of maintaining our military and commercial access to the global commons, Julian Corbett's maritime principles and recommended strategy for the British Navy are just as relevant today as they were when they were written during the turn of the twentieth century. As potential adversaries develop and acquire anti-access/area-denial weapon systems that can hinder our ability to operate safely within the global commons, Corbett's influential book, *Principles of Maritime Strategy*, outlines priorities and key concepts for strategy and policy makers to maintain our regional access within these areas.

There are multiple reasons for states to desire access to certain areas ranging from protecting citizens, denying parts of a region to an adversary, to maintaining security or ensuring access to natural resources; keeping the global commons open for world markets while potentially requiring military forces to deny specific areas to adversaries is the main goal behind the United States military's new Air-Sea Battle Strategy and Joint Operational Access Concept. Today's U.S. military concepts are similar to the primary goals of the British Royal Navy during the Napoleonic Wars. The successful doctrine and utilization of the British Royal Navy during this time period provides excellent examples of Corbett's "fleet in being" concept that the U.S. military can use as lessons learned in maintaining its access to key areas and resources.

Until recently, the ability for the U.S. to project power into any region in the world remained unchallenged. For many of our allies and partners, the U.S. military's ability to maintain freedom of access to the global commons brings comfort and stability to countries that do not have this capability. "The US military's role as the steward of the global commons in the international system has enabled the free movement of goods around the world, facilitating both general peace and prosperity."¹ Although the US has generally been a good steward of the global commons, adversaries have emerged that are disgruntled with America's ability to project power within their regions. These adversaries, with their own regional ambitions, are buying and developing military capabilities that have the potential of deterring the U.S. from operating within these contested areas. For the first time in several decades, the U.S. now has competition for access to the global commons. With nearly three quarters of the planet covered by water, ninety percent of world commerce traveling by sea and the vast majority of the world's population living within a few hundred miles of the ocean, it is extremely important for the U.S. to have a strong Navy and learn the valuable lessons crafted by Julian Corbett and the Royal Navy.

In 2009 the USAF Chief of Staff (GEN Norton Schwartz) and USN Chief of Naval Operations (ADM Gary Roughead) signed a classified memorandum initiating the efforts of both services to develop the operational concept named Air-Sea Battle.² The global commons are areas of air, sea, space and cyberspace that belong to no one particular state and assured access represents the unhindered use of these domains by any nation. In order for the U.S. to accomplish many of its strategic goals, it must ensure access to commerce, demonstrate resolve by positioning forces overseas to project power and legitimacy, manage crisis or defeat an enemy in war.³ As stated in *Sustaining U.S. Global Leadership: Priorities for 21st Century Defense*, "in order to credibly deter potential adversaries and to prevent them from achieving their objectives, the U.S. must maintain its ability to project power in areas in which our access and freedom to operate are challenged."⁴ Air-Sea Battle is a concept designed to improve the integration of air, land, naval, space and cyberspace forces to provide joint force commanders the capabilities to



deter and defeat an adversary employing sophisticated anti-access/area-denial capabilities.⁵

A2AD weapons are becoming increasingly sophisticated and as countries have studied U.S. military power projection strategies throughout the many years, they know our heavy reliance on both cyber and space technologies. Adversaries will deny and disrupt our access three ways. First, they will maintain air superiority over its territory and military forces with the integration of both air assets and air defense equipment. Second, they will disrupt our ability to maintain forces and pre-positioned equipment at intermediate staging bases (ISBs) by firing medium and long range ballistic missiles at these sites. Lastly, they will force our maritime forces to maintain distance from the Joint Operational Area (JOA) by firing anti-ship cruise missiles from surface or sub-surface vessels. These actions will force the U.S. military to use higher risk forced entry operations in order to gain a foothold into the JOA. Sophisticated countries have also started to develop munitions able to destroy space assets such as global positioning satellites (GPS), disrupting our ability to know where friendly forces are located as well as dropping precision guided munitions. Degrading American command and control along with disrupting our ability to move men, weapons and equipment into a contested area by a sophisticated military force poses a challenge to our military and allied forces that has not been experienced in decades by the U.S.

Truly the most problematic issue for the U.S. military in future conflicts will be our ability to conduct force generation into the JOA. This issue will become “a proverbial Achilles heel”⁶ to military forces as our power projection assets, like a U.S. Carrier Task Force, or our many forward operating bases like Andersen Air Base suddenly become within range of adversary A2AD weapon systems such as cruise missiles. For the purposes of this essay “*anti-access* refers to those actions and capabilities usually long range, designed to prevent an opposing force from entering an operational area. *Area-Denial* refers to those actions and capabilities, usually of shorter range, designed not to keep an opposing force out, but to limit its freedom of action within the operational area.”⁷ With the continued improvement of sophisticated A2AD weapons, forward operating bases, generally governed by other countries, will feel vulnerable from adversary threats and this may cause anxiety amongst political leaders of the countries where we stage pre-positioned equipment and forces. This anxiety could potentially force increased defense demands upon the U.S. to help protect countries assisting the U.S. or could ultimately cause countries like Turkey to order all U.S. military presence out of the country for fear of attack.

Admiral Jay Johnson, then the Chief of Naval Operations, expressed similar concerns when he stated, “over the past ten years, it has become evident that proliferating weapon and information technologies will enable our foes to attack the ports and airfields needed for the forward deployment of our land-based forces.”⁸ U.S. Naval forces such as Carrier Task Forces and Surface Action Groups could provide limited forward basing to first line forces but could only provide these forces in limited amounts without being completely restructured to carry out this mission set. Even with this option the threat of A2AD weapons would still exist forcing these naval forces to have a minimal littoral time necessary to accomplish the mission prior to the risk to the fleet becoming too great.

The geography and positioning of the U.S. is both a blessing and hindrance for military operations. In future regional conflicts, the U.S. military will be at a disadvantage by using exterior lines of communication and relying on other countries to help us force project into an area whereas our adversaries most likely will maintain the advantages of interior lines of communication. Geographic combatant commanders as well as service chiefs across the military have identified the problems associated with maintaining operational access and have implemented strategies across their areas of responsibility to maintain access to the global commons with regional partners. Building partner capacity with our current and future allies will help prevent future conflicts and ensure safe access and freedom of maneuver through the global commons. By strengthening the security and capabilities of our allied partners, this has the added benefit of increasing U.S. security and could prevent the involvement of our military in future regional conflicts. Regardless of the partnerships formed with regional partners “in the end, joint forces must be able to gain by force the operational access needed to accomplish the mission regardless of the initial conditions.”⁹



Arguably one of the most important goals for the U.S. geopolitically is maintaining control of the world's oceans.¹⁰ Since the end of World War Two the U.S. has had the advantage of maintaining the world's strongest and most influential Navy. Key possessions and partnerships with allies in the Pacific, Atlantic and Indian Oceans have afforded the opportunity of the U.S. Navy controlling the ocean. With the addition of the Air and Space domains, the U.S. can now effectively track seaward movement of vessels from anywhere in the world. With the incorporation of these new domains, Julian Corbett's "fleet in being" has become a reality to the U.S. as it was for the British Royal Navy during the 18th and 19th centuries. Regardless of these clear advantages, there is key terrain and choke points around the globe the U.S. must maintain access to in order to ensure our national success both economically and militarily.

Alfred Mahan once said that, "whoever controls the Indian Ocean dominates Asia. This ocean is the key to the seven seas in the twenty-first century, the destiny of the world will be decided in these waters."¹¹ When viewing the Indian Ocean on a map and looking at its geography, you come to the realization that unlike the Atlantic and Pacific, it is a closed ocean with strategic points surrounding its cardinal directions.¹² The Strait of Malacca, the island of Sri Lanka, Gulf of Aden, Strait of Hormuz, the Cape of Good Hope and Cape Australia are all vital points within the Indian Ocean that users must navigate through in order to traverse through the seaway. Within these strategic locations, seventy percent of all the petroleum products in the world depart this ocean to fill the needs of other countries.¹³ The Indian Ocean with all its tributaries flowing in and out is the globe's busiest and most important interstate.¹⁴ More specifically, "the Strait of Malacca is the Fulda Gap of the twenty-first century multi-polar world, the place where almost all of the shipping lanes between the Red Sea and the Sea of Japan converge at the most vital choke point of world commerce; where the spheres of naval influence of India and China meet; where the Indian Ocean joins the western Pacific."¹⁵ From this description of the Indian Ocean, with its limited choke points allowing access into a dominate natural resource arena, it is no surprise many historians and geopolitical analysts believe this region will be the most contested area in the 21st century.

Within the Indian Ocean, a large amount of international maritime vessels transit in and out of the Persian Gulf carrying vital natural resources, mainly oil and gas, to their countries of origin. Disruption to the freedom of access in and out of the Persian Gulf would be detrimental to not only these countries but to international oil and gas prices worldwide. The Strait of Hormuz, only 21 nautical miles at its narrowest point, is the key choke point for stopping or allowing 15.4 million barrels of oil per day from reaching the international community.¹⁶ "Similarly, the closure of the Straits of Malacca, through which 9.4 million barrels of oil per day flow, can seriously threaten the economies of Southeast Asia and the energy intensive economies of China and Japan."¹⁷ Closure of these two straits through military intervention or natural disaster would have immense security ramifications to the regions and worldwide economic impact. Sea line oil imports for the countries of India and China are expected to reach 91.6 percent and 76.9 percent by 2020 and these countries are expected to consume half of the world's oil use by 2030.¹⁸ Likewise twelve of the fourteen nations making up East and Southeast Asia are completely dependent on oil coming from the Middle East where these oil products must travel through both straits in order to reach their destinations.¹⁹ With the U.S. being the dominate maritime security player in world, she has the inherent right to not only secure these two vital sea lines of communication domestically but also for the international world order. Failure to provide security and access through these straits could escalate regional instability, instigating rapidly arising conflict.

As military planners and strategists look out through 2050 at what potential adversaries the U.S. military needs to be concerned with, China and Iran are the most likely candidates. Not only do Iran and China have a sophisticated enough military to cause some alarm within the joint community, but both countries are blessed with a geography that favors an A2AD strategy against a military intervention. With Iran and China fielding the number one and three sized militaries in the world, U.S. power projection into these areas would no doubt prove difficult and financially costly under the best of circumstances. After two decades of the U.S. military conducting both major combat operations and low intensity conflicts; our adversaries have learned U.S. strengths and weak-



nesses as well as ways to combat them.

Since the Taiwan Straits crisis of 1996, China's embarrassment and inferiority complex with the U.S. regional dominance in the area caused a shift in Chinese military strategy and efforts in the region. China is increasingly spending its money to strengthen its defense structure and military forces in an effort to cause Washington policy makers to think twice before intervening militarily with Chinese affairs and the One China Policy. Over the past two decades, China has observed how the U.S. military operates in both major combat operations and low intensity conflicts. They learned the U.S. military is heavily reliant on cyber communication networks, air and sea mobility platforms, precision guided munitions and space superiority and China has embarked on shaping their military to take advantages of these weaknesses. The Chinese have created a military force able to seize the initiative and exploit surprise by "breaking up the U.S. military's communications networks and launching preemptive attacks to the point where such attacks, or even the threat of such attacks, would raise the costs of U.S. action to prohibitive levels."²⁰ China's military buildup, intensified cyber-attacks and development of sophisticated weapons that can disrupt U.S. space assets has "consistently caught the U.S. intelligence community flat-footed in its estimates, time and again fielding capabilities significantly sooner than expected."²¹

With China's A2AD weapon systems it will become much riskier for the U.S. to come to the aid of Taiwan should China choose to conduct an invasion of a country they see as a legitimate part of China. In the event China becomes even more ambitious within the region, Chinese air and sea denial capabilities could allow them to conduct blockade operations throughout the first island chain perimeter, ultimately allowing them to achieve regional superiority in East Asia. "The message to the United States and its East Asian allies and partners is clear: China has the means to negate the American advantages in precision strike by holding at risk of destruction the forward bases from which U.S. strike aircraft must operate."²² China's ultimate goal is to be the regional hegemon in East Asia but prefers not to achieve this desired end state by a military conflict; rather they would prefer a bloodless victory by compelling Korea, Japan and Taiwan to accept Chinese interests in the region and reduce ties with the U.S.

In the future, China hopes to shift to a goal of a having a two ocean navy, one that can operate freely in both the Pacific and Indian Oceans. China's demand for energy, only second to the United States, is motivation for its foreign policy, national security policy and to some degree its buildup of military forces and capabilities.²³ As the passageways through the Indian Ocean to the South China Sea become more contested with pirates and navies from other countries, China must be able to secure its merchant vessels as they travel through such key terrain as the Straits of Malacca and Hormuz, the horn of Africa and the multiple inlets and outlets of Indonesia. Once China has a large enough persuasive navy to control these multiple waterways; China will look for naval vessel and merchant ship port access to Indian Ocean littoral countries like Pakistan, Sri Lanka, Bangladesh, Burma, Iran and Oman making their two ocean navy strategy a reality.²⁴

Iran, with a population of 74 million, owns one of the largest militaries in the world and in crisis could field a military force with approximately 12,285,000 total troops. The statistical numbers Iran can produce only get better when you view they are number three in the world for oil reserves, with 133 billion barrels and number two in the world for natural gas reserves with 970 trillion cubic feet.²⁵ Yet it is Iran's geography that may be most impressive within their strategic location along the entire northern width of the Persian Gulf and great warm water ports in the Indian Ocean. The Persian Gulf by some estimates contains 55 percent of the world's crude oil reserves and with Iran's strategic location it can dominate the gulf from the Shatt al Arab on the Iraqi border through the Strait of Hormuz, a distance of 615 miles.²⁶ Within the Persian Gulf region, Iran has the most capable military and pending no assistance by the U.S. military, could easily defeat its weak southern Arab neighbors.

Iran's strong Shiite government, able to dominate its population with an iron fist and radicalize its conventional military as well as non-state allies, has caused alarm not only within the U.S. but also the international community as to what Iranian intentions are in an already turbulent region. Iran sends clear messages to its



regional neighbors that by fielding advanced A2AD weapon systems, it can create conditions very unfavorable for the U.S. and her allies to maintain access within the Persian Gulf.²⁷ Ballistic missiles, shore-based and sea-based cruise missiles, submarines and advanced anti-ship mines are all weapon systems owned by Iran that could pose great harm and uncertainty to American power projection within the region should the U.S. need to intervene militarily to maintain access and regional stability in the area. Along Iran's southern coastline, there are over fifty large and small ports where Iran can maintain her fleet of conventional and unconventional naval vessels and A2AD systems to disrupt, when required, vessels running in and out of the Persian Gulf.²⁸

War with Iran would be a daunting task for the U.S. military, who are expected to 1) maintain relationships with Arab partners even in the event Israel is attacked, 2) defeat threats that could affect the global oil economy and 3) deal with a hornet's nest of A2AD weapon systems being fired at the U.S. as she tries to power project forces and military resources into the area. Threatening the world's global need for Middle Eastern oil by fielding capable A2AD military capabilities seems to be Iran's objective; as these weapon systems become more capable over time it will be increasingly difficult for the U.S. to maintain its major bases in the region as they become in range of Iranian weapon systems.²⁹ In order to maintain stability in the region the U.S. will have to maintain a credible forward presence in the area and help maintain the defense of the regions oil and gas infrastructure, including transportation and distribution facilities, all of which fall within range of Iranian ballistic missiles.³⁰ "As with the case of China, it seems likely Iran is more interested in creating a military capability able to coerce its neighbors and exhort concessions from major powers outside the region, rather than preparing for an actual war."³¹

As the U.S. military maintains access of the global commons during a timeframe when A2AD weapon systems are becoming more technically advanced and easier to acquire for both state and non-state actors, looking at Royal Navy lessons learned could assist the U.S. with winning Air-Sea Battle. British strategy during the Napoleonic Wars concentrated on securing key choke points throughout the empire with a naval force able to maintain lines of communication, dominate the seas and protect the home waters. With a strong Royal Navy, the British maintained a small but very capable army to secure and defend key pieces of terrain as well as conduct offensive operations when required. The selection of what key terrain and choke points to secure was based on preserving the British Empire economically and militarily. What made the British military's deterrence through strength strategy so successful was their military organizational structure and the mission type orders their commanders received from England enabling them to use their initiative to achieve positive results for the empire. Conceptual Air-Sea Battle uses a very similar strategy in order to preserve access to the global commons for the U.S.

Beginning in the 17th century through the time period of Julian Corbett's life, British leaders emphasized a deterrence through strength policy embracing a defensive strategy that could quickly turn offensive at a time of Great Britain's choosing.³² The main point of England's deterrence through strength policy was to intimidate opponents away from their desires by threatening the offensive capability of the Royal Navy.³³ For a maritime power, a naval deterrent strategy is only effective if numerous fleets are active that can bear vigorous offensive effects when the right conditions are set or if defense of key terrain or lines of communication are required.³⁴ This defensive minded strategy is referred by Corbett as "a fleet in being."³⁵

Julian Corbett, proposed in 1911 that "limited war is only permanently possible to island powers or between powers that are separated by sea, and then only when the power desiring limited war is able to command the sea ... to render impossible the invasion of his home territory."³⁶ Command of the sea gave Great Britain a military advantage by allowing her to maintain a strategy of limited war on land throughout the Napoleonic Wars. These limited land campaigns allowed the Royal Navy to drop off a small to medium sized land component to fight France and her allies to either gain control of an area required for the British Empire or to fight with coalition allies in order to deny France key terrain. This strategy was successful on numerous occasions throughout this period in places such as Italy, Egypt, Portugal, the Caribbean, West Africa, Java and India. These military operations allowed Great Britain to learn and practice joint maritime and land operations, where dependencies of each service were learned to ensure each operation improved throughout the period; the other countries during this



time period never came close to the joint efficiencies the British maintained throughout this era.

England's naval and ground forces were successful during the Napoleonic Wars because of their assured access to the global commons and their control of key strategic pieces of terrain allowing them to garrison forces and pre-position resources that enhanced their ability to project power into any area within their empire. Possession of strategic choke points and pieces of terrain helped maintain England's global empire both economically and militarily and allowed England to solidify Napoleon's defeat from 1793-1815.

In conclusion, in future conflicts where gaining initial footholds on contested ground is required, the U.S. military must be able to conduct force projection in a timely and synchronized manner. Gone are the days where our adversaries will allow months of force generation and pre-positioning of equipment into an area prior to conducting combat operations. To win Air-Sea Battle, the U.S. military must do three things. First, conducting force generation into an area must be fast with the proper force enhancements in place to defeat enemy A2AD counter actions. Second, the joint force must be comfortable operating in a degraded command and control environment and have alternate means in place to continue force flow operations. Third, the joint force must be familiar and comfortable with the regional partners and allies they will conduct operations with across the range of military operations

Arguably the number one challenge for the Joint Force falls within their inability to operate effectively in a degraded command and control (C2) environment. Ten years of persistent stability conflict in Iraq and Afghanistan, where no degradation of C2 systems have occurred, has caused the U.S. military to over rely and assume their advanced navigation and communication systems will always be operable. Currently the U.S. Army is going through significant growing pains with a generation of officers and NCOs that have lost crucial individual skills such as land navigation, using operational graphics and conducting an operation without the reliance on Army Battlefield Command Operating Systems (ABCS). For U.S. aviators, it is hard to imagine flying a platform, whether fixed wing or rotary, without relying in GPS navigation, satellite communication or data linking aircraft within flight. Are the days of reference point and celestial navigation over for U.S. military aviation assets; the answer I would give is I hope not. This synergy has awesome effects on today's modern day battlefield but also is an extreme vulnerability to air and ground operations if the enemy is able to disrupt the interdependence of these systems through A2AD assets.

Maintaining an exterior U.S. presence throughout the world by picking the right regional partners and basing options for our military forces is a critical necessity for the U.S. to maintain free access to the global commons. Darwin, Guam, Hawaii, Diego Garcia, Singapore, Bahrain, Crete and Rota are all examples of current or future basing locations the U.S. military sustains in order to achieve the access rights required to win Air-Sea Battle. Without British garrisons and naval bases like Gibraltar, the Cape of Good Hope, Java and Jamaica, England's command of the sea and ability to project power and protect commerce would not have been as successful. These bases provide the pre-positioned equipment and supplies needed for both the navy and army as well as rest locations and health facilities needed for U.S. service members. These requirements are just as relevant in today's operating environment as they were for the British centuries ago.

Preserving access to the global commons is an age old problem with intrinsic relevance to today's anti-access/area-denial strategies. In the summer of 2012, Admiral Greenert stated "Strategically, Air-Sea Battle can help us deter adversaries, reassure our partners and allies by demonstrating the ability to honor our security commitments and as necessary act worldwide for humanitarian assistance and disaster relief. Operationally, Air-Sea Battle provides us the ways and means to assure access."³⁷ Great Britain's ability to secure seaborne trade routes via naval supremacy throughout her empire allowed the country to prosper. By following historic British examples and strategies and Julian Corbett's fundamental principles, the U.S. military can achieve success in our Air-Sea Battle concept and maintain assured access within the global commons.



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NOTES

1. Andrew F. Krepinevich, *Why AirSea Battle?* (Washington, DC: Center for Strategic and Budgetary Assessments, 2010), 7.
2. *Ibid.*, 1.
3. *Joint Operational Access Concept*, U.S. Government White Paper (Washington, DC: Department of Defense, January 2012), 1.
4. *Gaining and Maintaining Access: An Army-Marine Corps Concept*, U.S. Army and USMC White Paper (Washington, DC: Army Capabilities Integration Center and Marine Corps Combat Development Command, March 2012), 3.
5. *Joint Operational Access Concept*, 4.
6. Krepinevich, *Why AirSea Battle?*, 8.
7. *Joint Operational Access Concept*, 6.
8. Krepinevich, *Why AirSea Battle?*, 9.
9. *Joint Operational Access Concept*, 8.
10. George Friedman, *The Next 100 Years A Forecast for the 21st Century* (New York: Random House, Inc., 2009), 44.
11. CDR P.K. Ghosh, *Maritime Security Challenges in South Asia and the Indian Ocean: Response Strategies* (Honolulu, Hawaii: Center for Strategic and International Studies, 2004), 1.
12. Robert D. Kaplan, *Monsoon: The Indian Ocean and the Future of American Power* (New York: Random House, Inc., 2011), 262.
13. *Ibid.*, 7.
14. *Ibid.*, 7.
15. *Ibid.*, 261.
16. Ghosh, *Maritime Security Challenges in South Asia and the Indian Ocean: Response Strategies*, 4.
17. *Ibid.*, 3.
18. Kaplan, *Monsoon: The Indian Ocean and the Future of American Power*, 7.
19. *Ibid.*, 262.
20. Andrew F. Krepinevich, *7 Deadly Scenarios: A Military Futurist Explores War in the 21st Century* (New York, NY: Random House, Inc., 2009), 186.
21. Krepinevich, *Why AirSea Battle?*, 13.
22. Krepinevich, *7 Deadly Scenarios: A Military Futurist Explores War in the 21st Century*, 189.
23. Kaplan, *Monsoon: The Indian Ocean and the Future of American Power*, 282.
24. Kaplan, *Monsoon: The Indian Ocean and the Future of American Power*, 283.



25. Robert D. Kaplan, *The Revenge of Geography: What the Map Tells Us About Conflicts and the Battle Against Fate* (New York, NY: Random House, Inc., 2012), 266.
26. Ibid., 267.
27. Krepinevich, *Why AirSea Battle?*, 27.
28. Ibid., 28.
29. Ibid., 35.
30. Ibid., 36.
31. Ibid., 36.
32. Rebecca B. Matzke, *Deterrence through Strength* (Lincoln & London: University of Nebraska Press, 2011), 30.
33. Ibid., 30.
34. Julian Corbett, *Principles of Maritime Strategy* (Mineola, NY: Dover Publications, 2004), 214.
35. Ibid., 214.
36. Noel Mostert, *The Line Upon A Wind: The Great War at Sea, 1793-1815* (New York and London: W.W. Norton & Company, 2007), 12.
37. Minutes, Air-Sea Battle Doctrine: A discussion with the Chief of Staff of the Air Force and Chief of Naval Operations (Alexandria, VA.: The Brookings Institution, 16 May 2012), 12.