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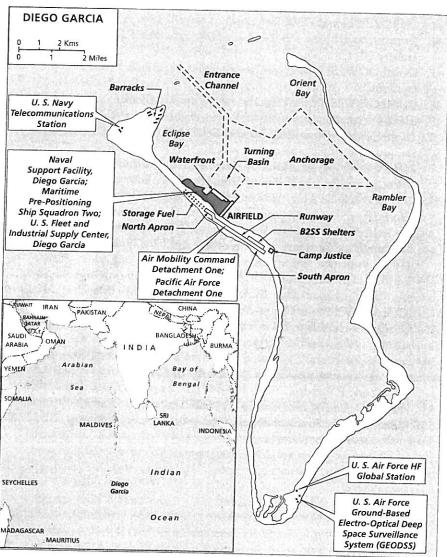
Diego Garcia and American Security in the Indian Ocean

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fter more than a decade of war, the U.S. military is returning to an expeditionary force posture across the Middle East and South Asia. To project power, deter adversaries, and maintain a credible contingency response capability, the United States must sustain a robust, continuous, and enduring maritime presence throughout the region. For decades the American base on the British island of Diego Garcia has played an important role in helping the United States sustain a forward presence in the region. Yet questions remain about the military importance of Diego Garcia and how the island might be used by the American military in the future.

U.S. forces operate from a network of bases and military facilities across the Indian Ocean littoral, stretching from Northeast Africa to the Middle East, the Arabian Peninsula and the Gulf, and South Asia. The United States maintains strong military-to-military relationships with several Gulf states, and these states host tens of thousands of U.S. troops at a number of land-based facilities. Such facilities do not come cheap or without liabilities, from host nation demands to popular opposition to the close proximity of Iranian missiles. Map 6 depicts Diego Garcia's location and current facilities.

Diego Garcia helps facilitate regional military operations because of its central geographic location in the Indian Ocean littoral. The U.S. military uses Diego Garcia for long-range bomber operations, special forces staging, the replenishment of naval surface combatants and guided-missile nuclear-powered submarines (SSGNs) capable of carrying out strike and special operations, and the prepositioning of Army and Marine Corps brigade sets.



Map 6. Military Facilities in Diego Garcia

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Diego Garcia is the sovereign territory of a close ally and does not present the uncertainty that periodically plagues other overseas bases. Elsewhere, host nations may question long-term American commitments or demand "tacit or private goods, which risks future criticism and contractual renegotiation in the event of regime change." Meanwhile, from a military standpoint, Diego Garcia's isolated location introduces operational challenges but also mitigates vulnerability to terrorist or state-based attacks.

Potential conflict involving Iran drives a significant portion of future U.S. force posture planning in the region. Such a contingency requires maritime assets continuously on station in the Gulf and the northern Indian Ocean as well as the use of land-based platforms operating from Gulf states. Specific components of U.S. military planning for possible Iran scenarios are classified, but the Iranian threat dictates a mix of maritime and land-based response options far closer to the point of action than Diego Garcia.

Our analysis proceeds in four sections. The first section examines the emerging strategic importance of the Indian Ocean littoral. The second, and most extensive, section concentrates on American interests in the Indian Ocean and surveys the history and development of the American presence on Diego Garcia as part of an expeditionary, networked basing strategy in the region. A third section examines India's and China's interests and activities in the region. The final section assesses the likelihood of great-power cooperation in the region, suggests how the United States might best develop and maintain basing and access there, and underscores the need for the further development of a U.S. regional strategy.

Geographical Pivot of the Twenty-First Century

Stretching from the Persian Gulf and the coast of East Africa on one side to the Malay Archipelago and the shores of Australia on the other, the Indian Ocean comprises an area of over 28 million square miles. The thirty nations that constitute the ocean's littoral region contain one-third of the world's population. Rich in natural resources, this geographical space contains 62 percent of the world's proven oil reserves, 35 percent of its gas, 40 percent of its gold, 60 percent of its uranium, and 80 percent of its diamonds.³ In addition, a host of important minerals such as iron, titanium, chromate, and manganese as well as raw materials like rubber and tin are found in abundance in various parts of the littoral region.⁴

The Indian Ocean is not just a source of raw materials; it is also a vital conduit for bringing those materials to market. Most notably, it is a key transit route for oil making its way from the Persian Gulf to consumers in Europe and Asia: 17 million barrels of oil a day (20 percent of the world's oil supply and 93 percent of oil exported from the Gulf) transit by tanker through the Strait of Hormuz and into the western reaches of the Indian Ocean. While large amounts of oil make their way to Europe and the Americas via the Suez Canal and the

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Cape of Good Hope, the more important route is eastward—Gulf oil provides nearly 75 percent of Asia's import needs.6 Roughly \$70 billion worth of oil annually crosses the Indian Ocean from the Strait of Hormuz to the Strait of Malacca, bound for markets in Japan, China, and Korea, while another \$16 billion worth flows to India. Such is the importance of this route that some commentators have termed it the "new Silk Road." Japan's economy is almost totally dependent on Gulf oil, with 89 percent of its imports shipped via the Indian Ocean, while Asia's two rising powers, China and India, are increasingly reliant on oil transiting the region. At present, more than 89 percent of China's hydrocarbon imports come via the Indian Ocean, and Gulf oil will soon account for 90 percent of India's imports.9

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In terms of global trade, the Indian Ocean is a major conduit linking manufacturers in East Asia with markets in Europe, Africa, and the Persian Gulf. In addition to more than two-thirds of the world's oil shipments, half of the world's containerized cargo and one-third of its bulk cargo travels the Indian Ocean's busy sea-lanes annually.10 The Asia-Europe shipping route via the Indian Ocean has recently displaced the transpacific route as the world's largest containerized trading lane.11

In 1904 British geographer Halford Mackinder described the Eastern Europe/Central Asia region as the "geographical pivot" on which the control of the Eurasian landmass, and potentially global hegemony, turned. 12 While this formulation accurately reflected the patterns of geopolitical conflict during the twentieth century, it is not an exaggeration to suggest that the Indian Ocean littoral could be the twenty-first century's pivot, with the potential to influence the global balance of power.¹³ Indeed, Robert Kaplan argues that the Indian Ocean is a key geographic space that melds energy, commerce, and security.¹⁴

Continued economic growth in both the developed and developing worlds depends in part on uninterrupted access to the Indian Ocean littoral's oil and mineral resources and the goods that transit it—particularly because 80 percent of the trade conducted across the Indian Ocean is extraregional.¹⁵ This causes the region and its sea-lanes to assume a strategic significance for many nations because political and military developments that adversely affect the flow of oil,

raw materials, or trade goods could impact global economies. The Indian Ocean littoral spans a great proportion of what Thomas Barnett

has termed "the Non-Integrating Gap." 16 This region has a high potential for producing dysfunctional polities-Foreign Policy magazine's 2010 index of failed states included nine littoral states in its top twenty-five. 17 Moreover, the potential for interstate conflict remains high as many states have unresolved maritime or territorial disputes in a region that lacks substantial collective security arrangements.

The particular geography of the ocean itself, which is bounded on almost all sides by choke points—the Strait of Malacca to the east and the Suez Canal, Cape of Good Hope, and Strait of Hormuz to the west—imposes challenges to maritime security. As two maritime analysts have noted, "If there was ever a case to be made for the relevance of strategic choke points, it is here, at the aquatic juncture between the world's largest sources of petroleum and the world's most import- and export-dependent economies." Not only are ships in these narrow sea-lanes vulnerable to attack by terrorists or capture by pirates, but control of these bottlenecks has been the key to dominating this ocean since the Portuguese first arrived in the fifteenth century.

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In addition to conventional security challenges, the littoral is plagued by a host of irregular security threats. A syndicate of violent extremist networks, including al-Qaeda and associated movements, operates from poorly governed spaces. While maritime trade routes are at risk from piracy on the high seas, the very same waterways that transport goods are also used for human smuggling, drug trafficking, and gunrunning as well as proliferation of munitions among insurgent groups. Several other challenges exacerbate existing ethnic, tribal, and religious tensions, including a large youth population, a growing surplus of males, and competition for increasingly scarce natural resources (fresh water is particularly limited).

Finally, the region also has the potential to be the scene of great-power conflict. In the context of the simultaneous rises of both India and China, Kaplan argues that "the Indian Ocean is where global struggles will play out in the 21st century." It is not an exaggeration to suggest that the Indian Ocean littoral could be pivotal geopolitically. Any country that exercised a dominant role in the northern Indian Ocean would have the ability to affect the oil and trade routes from the Middle East to Europe and Asia—and thereby exercise negative influence over the industrialized world. As the world's strategic center of gravity shifts from the Euro-Atlantic region to the Asia-Pacific, therefore, the Indian Ocean is increasingly seen as "the ocean of destiny in the 21st century." ²⁰

The United States and the Indian Ocean

As outlined by Christopher Layne, U.S. strategic priorities since the end of the Second World War have been preventing the emergence of a rival hegemon in Europe or Asia while guaranteeing order in key areas of the periphery—most notably the Persian Gulf.²¹ In this light, developments in the Indian Ocean are important to the United States because they affect the achievement of these broader goals. Among Washington's most significant interests are securing the sea lines of communication (SLOCs) that pass through the region, preventing hostile powers from dominating the littoral, and disrupting the operations of al-Qaeda–affiliated groups.

Indeed, the Indian Ocean region links the land and maritime theaters that most concern American strategic thinkers. The U.S. National Security Strategy

identifies two land theaters of vital interest: Iraq and the greater Middle East, and Afghanistan/Pakistan.²² Similarly, the nation's maritime strategy identifies the western portion of the Indian Ocean, which includes the piracy-plagued Horn of Africa, and the western Pacific as theaters of vital interest.²³

The United States has an interest in preventing the emergence of a hostile regional power that could threaten the flow of commodities in the region.²⁴ To the West, Iran could threaten to shut the Strait of Hormuz, the world's most important maritime choke point. Iran's ability to employ attack submarines, sea mines, antiship cruise missiles, and perhaps even an antiship ballistic missile (Khalij Fars) will make it difficult to prevent Iran from shutting the Strait, although senior U.S. officials have declared that the United States can and will prevent Iran from doing so, if necessary.²⁵ Moreover, in the context of the ongoing dispute over Iran's nuclear program, Tehran conducted a series of naval maneuvers in 2006 that appeared to be intended to signal its ability to block the Strait of Hormuz in a crisis.²⁶ Lt. Gen. Ronald Burgess, director of the Defense Intelligence Agency, has testified that "if attacked, or if sanctions on its oil exports are enacted, Iran has threatened to control traffic in or temporarily close the Strait of Hormuz with its naval forces, a capability that it likely has."27

At the same time, from Southeast Asia to the coast of East Africa, China has increased its extraregional presence and political influence in its quest for energy. There is widespread speculation that Beijing is cultivating an informal set of access rights to local ports that could increase the Chinese navy's ability to project power into the littoral.²⁸ Although Chinese expeditionary naval capability remains limited, the mismatch between expressed concerns over the security of energy flows through regional choke points and China's actual behavior to date bears monitoring. Should one or both of these nations, Iran or China, achieve a more influential role in the littoral, it could have significant implications for American strategic interests.

Finally, U.S. interests in the region are also conditioned by the fact that the littoral has been ground zero for its nearly decade-long struggle against violent extremists. Prior to 11 September 2001, the United States had been the victim of al-Qaeda-backed terrorist attacks in Kenya, Tanzania, and Yemen. Today the United States is conducting a global counterterrorism campaign through a network of special operations forces. Given its location at an intersection of two main reservoirs of Islamic extremism, the Middle East and Southeast Asia, the Indian Ocean is, as one commentator has branded it, a "lake of Jihadi terrorism."29 Al-Qaeda has repeatedly proclaimed its desire to cripple the West economically by targeting the oil-rich Gulf sheikdoms in the western reaches of the Indian Ocean that are friendly to the United States. In the past decade, agents acting in al-Qaeda's name have targeted American civilian and military entities in Yemen, Jordan, Bahrain, the United Arab Emirates (UAE), the Strait of Hormuz, and the Strait of Malacca.

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The globalized nature of financial and commodity markets ensures that major political and economic tremors in the Indian Ocean are soon felt in America. Moreover, as American naval analysts have recently noted, "As the world's greatest trading nation, the U.S. economy . . . would not be so prosperous or dynamic were American or foreign-flagged shipping unable to use the world's oceans at will, free from restriction and interference." In recognition of the importance of this region to American interests, the 2007 U.S. maritime strategy reoriented the two-ocean focus of the Navy and Marine Corps from the traditional Atlantic and the Pacific to the Indian Ocean and the Pacific, thereby declaring the intent to maintain sufficient forces in these latter regions to deter or defeat any hostile power. In 2011 the U.S. Department of Defense released a new defense strategy with a key element of rebalancing the force to emphasize the Asia-Pacific region.

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As an extraregional power, the United States can play a key role in managing stability in the region, whether by leading multilateral responses to irregular security threats, such as piracy, or by preventing the escalation of interstate conflict to dangerous levels. To achieve its regional objectives, the United States does not require a major ongoing military commitment to the Indian Ocean; rather, regular military deployments coupled with the ability to surge forces into the area during a crisis would provide the ability to deter most threats to U.S. interests there. These factors combine to make the centrally positioned island of Diego Garcia "one of the most strategic American bases in the world."³²

The Malta of the Indian Ocean

The Indian Ocean has long been a crucial conduit for transit and commerce in the region. Since 2500 BC, traders and explorers from ancient Egypt, Phoenicia, the Persian Empire, the Indian subcontinent, the Arab states, and even China have all plied its waters in search of gold, incense, spices, and silks.³³ The ocean's role as a strategic base from which naval power could be employed to dominate the littoral regions did not develop until the arrival of the Portuguese in 1497. The rounding of the Cape of Good Hope by Vasco de Gama changed the strategic value of naval power in the Indian Ocean. Previously navies had played only a minor role in a region where land power had been the primary means by which the Persians, Hindus, and Arabs built large empires.³⁴

Employing a strategy that would be duplicated by other European powers, the Portuguese sought to cement their position in the littoral region by establishing a series of strongholds, supported by naval power, along the strategic approaches to the Indian Ocean. To Control of key choke points such as Socotra, Hormuz, and Malacca secured Portuguese influence over the Indian Ocean. The goal was not territorial conquest per se but rather control of the trade routes that brought spices, raw materials, and goods from Asia to markets in Europe. 36

The ensuing centuries saw the Dutch, the French, and the British joining the Portuguese in bids for supremacy in the region.

The maritime dominance Britain achieved following the battle of Trafalgar in 1805 was solidified after the defeat of Napoleon in 1815. Unrivaled dominance at sea, together with control of India, Singapore, and the Persian Gulf, allowed the Royal Navy to transform the Indian Ocean into a British lake-a condition that lasted until the end of the Second World War. British influence was felt throughout the littoral region.

Of the various bases available for projecting power into the Indian Ocean region, the Europeans favored island strongholds. These facilities, which could also serve as supply stations, allowed the desired control of trade routes yet did not have large populations to be governed or hinterlands from which rebellions could be launched.

Diego Garcia, named after the Portuguese navigator who discovered it in 1532, is the largest of seven islands that constitute the Chagos Archipelago. Located in the Indian Ocean, Diego Garcia is approximately 1,000 miles south of India, 700 miles southwest of Sri Lanka, and 2,500 miles southeast of the Strait of Hormuz. The island consists of a wishbone-shaped coral atoll, 14 miles long and 4 miles wide, surrounding "one of the finest natural harbors in the world." 37 With a total surface area of 11 square miles, Diego Garcia has an average elevation of 4 feet; the highest point on the island reaches 22 feet above sea level. Regarding climate change and rising sea levels, Secretary of the Navy Ray Mabus stated in a 2013 interview, "You won't begin to see impacts until the middle of this century, and major impacts until well into the next century. So, it will remain crucial for us as far out into the future as we are able to see right now."38

Diego Garcia was largely ignored for two and a half centuries until the French laid claim to it in 1783.39 African slaves were introduced onto the originally uninhabited atoll by the French East India Company. Slave labor was used to harvest copra (dried coconut meat) and to produce oil from it. This oil was exported via Mauritius to France, where it was used for illumination and as a fuel for motors.

The board of directors of the British East India Company became increasingly concerned with France's footholds in the Indian Ocean, leading the company to launch in 1786 an expedition to Diego Garcia that succeeded in capturing the island. In the Treaty of Paris that ended the war between Napoleonic France and the Sixth Coalition in 1814, the majority of France's Indian Ocean territories, including Diego Garcia, were formally relinquished to Britain. The British government was largely unconcerned with Diego Garcia, and little changed appreciably following the change of control. A survey conducted at the time of its seizure had indicated that despite the quality of its harbor, the cost of fortifications and a permanent garrison would far outweigh the island's benefits. 40 Under British rule, the islands of the Chagos Archipelago were administered by Mauritius, 1,500 miles to the southwest, much as they had been by the French. The former slaves, now freed and hired on Diego Garcia's three plantations as contract workers, were supplemented by laborers from Mauritius and the Seychelles, yet copra production remained the island's sole industry. He mid-1880s there were approximately three hundred contract laborers on Diego Garcia. The island featured a hospital, a church, a jail, and a "police officer, with a proper staff of constables." Diego Garcia's deep harbor made it a useful coaling station for steamships traveling from the Suez Canal to Australia.

During the Second World War, the British government established a small base and communications facility on Diego Garcia. The primary mission of this facility was to reconnoiter for German submarines and naval raiders preying on Allied shipping transiting between India and Australia. Two battalions from the British Indian Army were deployed to the island, as was a contingent of PBY Catalina flying boats. The German submarine threat in the Indian Ocean declined by 1942; the Diego Garcia garrison was withdrawn, and the island resumed its status as a forgotten corner of the British Empire. Matters remained so in the first decades of the Cold War.⁴⁴

Despite being a maritime power with a long seagoing tradition, the United States had not traditionally possessed an integrated strategy for the Indian Ocean littoral. Instead, ad hoc responses to emerging challenges characterized its regional approach. During the first half of the twentieth century, Britain's dominance at sea and its imperial role in South Asia led the United States to regard the Indian Ocean as a British preserve. 45 Reliance on British power to "police" the region extended into the early decades of the Cold War. Until the early 1960s the Indian Ocean remained largely neglected in American strategic planning. American postwar strategy concentrated on the Atlantic, the Pacific Basin, and, to a lesser extent, the Mediterranean as Western Europe and Japan were viewed as essential territories in the struggle against global communism.46 Involvement in the Indian Ocean littoral consisted primarily of economic and military aid rather than the deployment of military forces. A token U.S. naval presence—three obsolete destroyers of the Middle East Force-was based in Bahrain. American strategic interests in the region were narrowly conceived and focused exclusively on securing access to Gulf oil. Given Britain's naval and political dominance in the region, many American policy makers continued to see the security of the Indian Ocean and adjacent Persian Gulf as Great Britain's responsibility.

Some elements within the U.S. Navy, however, recognized the need to acquire a logistics base in the Indian Ocean that could support local contingency operations. Requirements included a communications station for ships and aircraft in the area, an airfield capable of operating long-range reconnaissance aircraft, and a supply depot that could sustain a U.S. naval presence. Such a facility would have to be strategically located, based on a site that was not heavily populated,

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and free from political restrictions on its use.⁴⁷ (These attributes remain Diego Garcia's key strategic advantages.)

As Third World nationalism swept through the Indian Ocean region in the wake of decolonization, the Navy became increasingly aware of the susceptibility of shore-based facilities to popular opinion in host nations. 48 Lightly populated islands, on the other hand, would presumably be relatively free from coups and political protests, and the presence of foreign bases might be less likely to aggravate local opinion. As part of what became known as the "strategic island concept," therefore, naval planners advocated securing basing rights on strategically located and "sparsely populated islands." 49 Among the most promising "strategic islands" identified by American naval analysts was the British-held territory of Diego Garcia. Adm. John McCain noted, "As Malta is to the Mediterranean, Diego Garcia is to the Indian Ocean—equidistant from all points."50 Gaining access to Diego Garcia became a top priority for the Navy as the concept for a facility there received high-level support from the chief of naval operations, Adm. Arleigh Burke, and Secretary of the Navy Paul H. Nitze.51

Events in the early 1960s appeared to compel a greater U.S. involvement in the Indian Ocean region. In 1961 Britain began to discuss the possibility of withdrawing its forces from "East of Suez." 52 The following year the United States found itself hard-pressed to render emergency assistance to India during its 1962 war with China.53 Concerns about a power vacuum in the region should the British actually draw down their forces coincided with a recognition that a U.S. military presence was necessary "to lend muscle to American diplomacy in the region."54

In 1963 the United States initiated talks with the British government about establishing a shared Anglo-American defense facility on Diego Garcia, which was by then a dependency of the self-governing crown colony of Mauritius.55 The British welcomed the proposal because an American presence would complement their efforts to deter "communist encroachment in the littoral countries and might assist in dealing rapidly with local disturbances." London also saw Diego Garcia as a potential base for a military presence in the Indian Ocean, should Britain lose access to Aden or Singapore. 56

As Britain's Indian Ocean colonies moved toward independence, London took action to secure strategic islands for defense purposes. As a condition of independence, the government of Mauritius had been persuaded to surrender its claims to the Chagos Archipelago. This island chain was subsequently combined with three islands that had been detached from the Seychelles to form a new crown colony, the British Indian Ocean Territory (BIOT), which came into being on 8 November 1965. As the colonial secretary told the House of Commons in announcing the formation of the new colony, "The islands will be available for the construction of defense facilities by the British and United

States governments."⁵⁷ The government of Mauritius was given \$8.4 million in compensation for the loss of its territory.⁵⁸

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An exchange of notes between the United States and the United Kingdom in December 1966 made the entire BIOT available "for the defense purposes of both governments as they may arise." ⁵⁹ Although the agreement made the territories available to the United States "without charge," the United States entered into a confidential agreement to compensate the United Kingdom for half the costs of establishing the colony. ⁶⁰

Although ideal in many respects and never self-governing at any time in history, at the time of the creation of the BIOT Diego Garcia had a population of 483 men, women, and children. All but 7 of these were employees (or their dependents) of the copra plantations owned by the Seychelles-based Chagos-Agalega Company.⁶¹ Both the British and American governments believed that establishing defense facilities on the island would require closing the copra plantations and resettling the workers and their families. 62 After the formation of the BIOT, the government of Mauritius informed its nationals working in the Chagos Archipelago that they should seek alternate employment.⁶³ It was hardly exceptional to close plantations and transfer workers—the copra plantations on three other islands in the Chagos Archipelago had been discontinued during the interwar period and their employees relocated.64 Between 1965 and 1971, under the direction of the British government, the Chagos-Agalega Company ceased renewing work contracts for existing employees. This natural attrition took its toll; by the time the plantations stopped operating in 1971, only 359 inhabitants remained on the island.65 In preparation for the start of construction on the joint communications facility, the company evacuated the remaining civilian population by ship to Mauritius.66 The British government paid the government of Mauritius a total of \$8.6 million to cover the costs of resettlement.⁶⁷

Construction commenced on an austere communications facility and an eight-thousand-foot runway in March 1971. This was quickly followed, in October 1972, by a second Anglo-American agreement on Diego Garcia that formally approved the construction plans for the communications facility as well as "an anchorage, airfield, associated logistics support and supply and personnel accommodations." The communications post became operational in early 1973—a dynamic time in the Indian Ocean littoral. In January 1968 the Labor government of Harold Wilson surprised the world by announcing its intention to withdraw all British forces from the Far East and the Persian Gulf by 1971. From a Western perspective, Wilson's decision could not have come at a worse time. The increasingly unpopular war in Vietnam constrained Washington's ability to assume military commitments in other parts of the globe in order to fill the void left by the British, whereas the Soviet Union and China appeared to be expanding their influence around the world. In the wake of the British announcement, the Soviet navy began regular deployments to the Indian Ocean.

In response, the United States undertook a "major shift" in its regional strategy, one that saw a significant increase in the frequency of naval patrols in the Indian Ocean.72 The logistical difficulties of supporting these increased deployments, combined with a noticeable growth in the Soviet naval presence, led the Navy to the conclusion that Diego Garcia had to be expanded.73 In February 1976 a third British-American agreement approved an upgrade from a "limited communications facility" to a "support facility of the U.S. Navy," which one scholar calls "a diplomatic euphemism for a full-scale American naval/air base."74

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The need for such a facility in the region was made clear in 1979, when revolution swept through Iran and the Soviet Union invaded Afghanistan. Under the Nixon Doctrine, the shah's Iran had been America's self-professed policeman in the Persian Gulf-defending the West's economic, political, and strategic interests. With the shah's overthrow, the United States lost a security buffer between the Soviet Union and the Gulf, and lost access to the strategically located Iranian ports of Bandar Abbas and Chah Bahar. Washington feared that radical extremist Islamist militancy could undermine the pro-Western states of the region and provide an avenue for Soviet intrusion, which had been on display in the Middle East and the Horn of Africa even before Soviet combat troops entered Afghanistan in December 1979. The 1973-74 oil embargo had alerted Western leaders to their vulnerability to an oil-supply disruption. With up to 80 percent of the strategic minerals consumed by Japan, Europe, and the United States transiting the Indian Ocean, Washington believed that a base was needed to maintain resource supplies and deter threats to disrupt them.75

In the early 1980s Diego Garcia saw a host of construction projects as the facility was turned into a logistical hub for naval forces in the Indian Ocean. This upgrade involved deepening the lagoon so that it could berth a dozen ships, establishing a fuel storage depot that could supply a carrier battle group for a month, and extending the runway to 12,000 feet to accommodate America's largest tanker and cargo aircraft as well as SR-71 reconnaissance aircraft.76 Such a facility would provide the United States a secure naval base in the Indian Ocean, a hub to project power into the region, under the control of America's closest ally. While not ideal in every respect, it would add a significant component to the U.S. force structure. In this way concerns that the United States would be denied access to local bases in a regional crisis, as they had been in the 1973 Yom Kippur War, were allayed.

The extension of the island's airfield and upgrade of its communications suite allowed the temporary basing of long-range bombers, such as the B-52. Diego Garcia also became the home of a fleet of seventeen maritime prepositioning ships that carried enough equipment, ammunition, and fuel to outfit a mechanized Marine amphibious brigade.⁷⁷ The improvement of Diego Garcia's facilities and the prepositioning of military equipment significantly enhanced the United States' capability to project power into the Indian Ocean littoral and created the potential to take a more active role in the region's affairs.

Defense Planners and the Footprint of Freedom

From these beginnings, America's use of Diego Garcia as a forward operating base has grown over time. Diego Garcia's status as a modern base materialized gradually over the last thirty years, growing out of its value as an in-transit supply and repair station and its dependability. These traits make the island useful for both routine operations and crisis response. The island also serves as a prepositioning point for a collection of ships in the island's harbor that carry logistical equipment for contingency operations.

Even for assets that possess extended endurance, Diego Garcia remains a natural service stop when entering and exiting the Indian Ocean. The island routinely receives long-range bombers, fast-attack submarines, and medium-sized surface ships between missions as part of Central Command task forces. In its current state, then, Diego Garcia fulfills an important regional support role for logistics and operations. Planned construction presages a much-expanded role for the island as a primary maintenance and upkeep facility for naval assets.

The island suffers from a number of challenges similar to other forward-support locations.⁷⁸ First, the "tyranny of distance" both adds and detracts value from the island. Diego Garcia, while centrally placed, is too far—seven degrees south of the equator—from the locations of likely regional threats for immediate response. With flexibility and speed as their priorities, planners prefer bases closer to anticipated points of action—a forward posture that calls for more bases in more places.

Diego Garcia contains only one runway and one quay wall (to which ships can moor), and that small footprint is far less than required for a buildup of material to support a major military engagement. Nonetheless, should the need arise to surge units and equipment to the area, planners could expect to use Diego Garcia without delay.

Planners understandably place a high priority on assured access to regional bases. If the atoll is thousands of miles from any given area of interest, it is central to many others. Absent advance notice of the next hot spot, it is sensible to concentrate on the center of the overall operating area. Accordingly, quasi-sovereign access to the island remains critical to continued operations in the theater.

The new U.S. defense strategy calls for the future force to remain agile and flexible in order to respond to regional threats and defeat any adversary, anytime. Diego Garcia helps to provide such flexibility, but it is relatively far removed from likely contingency locations in the northern Indian Ocean. A submarine takes five days to transit from the island through the Strait of Hormuz into the Persian Gulf and even longer to travel through the Bab al Mandeb into the Red Sea. Critically, though, planners much prefer the guarantee that Diego Garcia

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represents. The U.S.-British military agreement in the BIOT is expansive, long-term, and steadfast. The unified maritime strategy explicitly reinforces the importance of that agreement: "Credible combat power will be continuously postured in the Western Pacific, the Gulf, and the Indian Ocean to protect America's vital interests, assure our friends and allies of the continuing commitment of the U.S. to regional security, and deter and dissuade potential adversaries and peer competitors. This combat power can be selectively and rapidly repositioned to meet contingencies that may arise elsewhere." 79

Beyond the military agreement, American and British officials meet annually for a two-day political-military dialogue to examine treaty arrangements and procedures for the U.S. use of British territories (not only Diego Garcia but Ascension Island as well, among others). In recent years, the discussions on Diego Garcia have focused on advance notification of British travelers to the island, U.S. munitions storage, the Chagos population, taxation of international communications, and environmental issues. The lease between the United States and the United Kingdom will be up for renewal in 2014; though no major disagreements are expected, discussions involving renewal will offer an opportunity for both parties to press for concessions on payment and infrastructure development plans.80 Like its Pacific counterpart, Guam, Diego Garcia is a preferred launching point for prepositioned stock and munitions to surrounding hot spots. Unlike with Guam, however, defense planners long hesitated to modernize the island's aging infrastructure. This is no longer the case. After a ten-year hiatus in structural improvements to the pier, a refit and facilities upgrade have returned to the budget priority list. This is no coincidence. The U.S. military will continue to confront violent extremism, Iran's nuclear ambitions and destabilizing actions, and other regional threats over the long term. In this context, Diego Garcia offers a stable platform from which to protect the promise and opportunity of the Indian Ocean. Absent interference from rogue elements, the ocean links the Middle East and Africa to the trade routes of the western Pacific. The island links—and helps to coordinate the efforts of—three nearby combatant commands, each of which endeavors to remove these elements of interference.

The island sits a few hundred miles southeast of the vertical seam of the Central and Pacific Commands (CENTCOM and PACOM). That seam divides the Indian Ocean and then cuts due west along the equator toward Kenya and Africa Command (AFRICOM). CENTCOM retains the upper-left quadrant of the Indian Ocean. The corner of this area of responsibility (AOR) juts to within a day's transit of Diego Garcia. As a result, many units changing operational command between PACOM and CENTCOM naturally employ facilities on Diego Garcia to receive deliveries and for crew rest. This is especially important for B-1 and B-2 pilots 'on missions (often longer than forty hours) that originate from theaters other than CENTCOM. After these fatigued bomber crews complete

their missions and withdraw from harm's way, they need a safe haven in which to fuel, rest, and prepare to return home.

Other practical reasons validate frequent stops at the island. In particular, units—particularly ships—in transition between commands must adjust to different operational rules, communications circuits, and command relationships. Diego Garcia acts as a gateway for ships en route from one AOR to another to pause, fix equipment, train, and demonstrate material readiness and crew proficiency for certification to higher-level commanders. The president and the secretary of defense authorize platforms to execute sensitive national-security tasking in-theater. No other base affords similar flexibility on the rim of the Indian Ocean in such a key mission area as the Horn of Arica.

As operational tempo increases throughout the region, the need to improve basic services on the island has grown. The military practicality of the island, then, justifies further American investment to this narrow strip of land to meet combatant commander requirements. These requirements include increased payloads for vertical strike (often quantified in terms of the number of serviceable Tomahawk missiles in-theater at a given time), increased surveillance capabilities, and increased operational flexibility for short- and long-range aircraft.

But although planners agree on the general utility of Diego Garcia, they find it difficult to reach consensus on how best to capitalize on the island's central placement. The parochial interests of three nearby combatant commanders confuse the setting of regional priorities that would contribute to a coherent, long-term construction plan for the island. The U.S. Unified Command Plan, as noted, splits the Indian Ocean in two along the line that separates the AORs of CENTCOM and PACOM. This axis, at 68 degrees east longitude, divides "ownership" of the region and thereby promotes indifference to the unique aspects of Indian Ocean security as a whole. In particular, the United States too often overlooks the concerns of Indian leaders about U.S. military development on Diego Garcia (discussed later). Consequently, Diego Garcia's role within the region remains unclear, and construction plans for the island are often delayed or derailed by the lack of a comprehensive regional strategy for the Indian Ocean.

Diego Garcia at Present

Diego Garcia acts as a fixed warehouse from which the U.S. Navy and Air Force support operational units throughout the region with fuel, food, routine supplies, spare parts, munitions, aircraft shelters, maintenance services, and communications. The Navy is impacted minimally by the island's remoteness (with the important exception of potential escalation involving Iran, which could happen faster than ships could respond from Diego Garcia). However, the island cannot accommodate large Navy platforms at its small pier. Conversely, Air Force fighters cannot traverse the Indian Ocean to Diego Garcia without help from tankers,

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an operationally burdensome reality, but the long runway on the island accommodates any aircraft in the inventory.

The atoll serves four primary functions for American commanders: a full one-third of the entire U.S. Afloat Prepositioning Force occupies the lagoon; fast-attack submarines and surface ships use the deep-draft wharf; an Air Expeditionary Wing supports tactical and long-range aircraft; and a telecommunications station tracks satellites and relays fleet broadcasts to units in the area. We will treat each function in separate sections and then consider the current status of island utilities in support of the overall effort.82

The Afloat Prepositioning Force

The U.S. military prepositions stock at three primary locations: in the Mediterranean, on Diego Garcia, and on Guam. Combatant commanders would enjoy tremendous flexibility should it become necessary to call upon these nearby assets. The design basis for prepositioned stock enables an Army and Marine Corps brigade to mobilize within twenty-four hours anywhere within the region without additional support for up to thirty days.83

Several layers of command oversee these stocks. The Afloat Prepositioning Force, including strategic sealift forces commonly referred to as "prepositioning ships," falls under the authority of the Military Sealift Command (MSC), itself a component of U.S. Transportation Command. Diego Garcia hosts Maritime Prepositioning Squadron 2 (MPSRON 2), one of three squadrons under MSC authority operated by professional civilian mariners.84 MPSRON 2 maintains between ten to fifteen forward-deployed prepositioning ships within Diego Garcia's dredged lagoon, which ranges from sixty to a hundred feet deep.

Three primary clients demand MSC support: the Army, the Marine Corps, and a joint-service group. The Army loads its forward equipment on Afloat Prepositioned Stocks 3 (APS-3) ships. Diego Garcia's eight APS-3 ships provide Army commanders a thirty-day buffer during which replacement equipment for an advance brigade can be sent from within the region. These ships, designated T-AKRs, carry combat-support and combat-service-support elements. As hostilities escalate, APS-3 ships can position heavy armor, land-based reconnaissance equipment, artillery, and combined-arms battalions in-theater from Diego Garcia within a week.

The Marine Corps benefits from similar readiness in the Indian Ocean should commanders exercise the dedicated MSC Maritime Prepositioning Force. Five of these ships in Diego Garcia, designated T-AK, enable the decisive speed of a Marine expeditionary brigade. Together the ships can equip 15,000 Marines already on the beach and conduct simultaneous helicopter operations. The concepts of operations of the Marine Corps Maritime Prepositioning ships and Army APS-3 ships are matched in terms of self-sufficiency and roll-on/roll-off capability.

A group comprising a mix of other customers makes up the third major client of the Afloat Prepositioning Force: the Navy, Defense Logistics Agency, and Air Force ships (known collectively as the Prepositioning NDAF) transport Navy and Air Force munitions and ordnance for transfer to smaller carriers on land or via at-sea replenishment. The Prepositioning NDAF includes separate petroleum-delivery ships, high-speed vessels, and aviation-logistics support ships, all of which can be vectored to Diego Garcia for urgent availability.

With sustained speeds in excess of thirty knots, sealift ships are considered the fastest cargo ships in the world. As a result, CENTCOM can dispatch these prepositioned assets to a regional crises; in the Indian Ocean region especially, this has meant humanitarian as well as combat missions. 85 Of note, however, a typhoon approaching Diego Garcia would force the local operational commander, a Navy captain, to send the squadron out to sea, as the low-lying island affords little protection from the wind.

Naval Forces Support

A general-purpose, deep-draft wharf or quay wall 2,000 feet long and 150 feet wide serves the island. The wall sits within the island's interior lagoon to the northwest and contains two main berths (Berth A, or "Alpha Wharf," to the north, and Berth B, or "Bravo Wharf," on the south). Typically the pier receives a T-AKR for a week each month at Alpha Wharf; in the current configuration, the supply ship moors starboard side to. The pier can accommodate a fast-attack submarine (SSN) at Bravo Wharf. In rare circumstances, the pier accepts up to two nested SSNs (one alongside the pier, the other outboard).

Naval Support Facility Diego Garcia consolidates the services available to personnel on the island. Shore support facilities include buildings for spare equipment, housing for electrical power cables and associated distribution breakers, pier space for service craft, and bachelor quarters for residents and flyaway maintenance teams. Recreation options, however, remain limited for shipboard personnel visiting the island. By comparison with other overseas U.S. military installations, Diego Garcia has only modest amenities and little room for expansion.

Air Force

Various U.S. Air Force planes land on Diego Garcia's generous runway, and an Air Expeditionary Wing occupies its airfield. Detachments of Pacific Air Forces operate and maintain aircraft temporarily posted on the island. On a continual basis, shore support elements service about ten long-range bombers with munitions, fuel, and supplies. B-1 and B-52 bombers line the landing field, while visiting B-2s use four special hangars designed to protect the planes' sensitive skins. The hangars, constructed in 2003, represent the latest significant upgrade to Diego Garcia's structural facilities. The Air Force has established Diego Garcia as an en-route base for the Air Mobility Command.⁸⁷

Long-range bombers based at Diego Garcia have been—with the possible exception of unmanned intelligence surveillance aircraft—the Air Force's most important asset in Operation Enduring Freedom.88 Throughout the initial air campaign, gunships and fighters based in Turkey and elsewhere encountered logistical difficulties and soon ceded their strike taskings to the bomber fleet based on Diego Garcia. Bombers were able to operate in Afghanistan with relative impunity after the first few days of strikes due to the limited antiaircraft capabilities of the Taliban. Unimpeded bomber operations from Diego Garcia could be expected only in future conflicts against similarly disorganized and poorly armed terrorist groups—not against a modern military force such as Iran's.89

For tactical air operations, Diego Garcia's distance from other land introduces far greater levels of complexity and demands multiplatform coordination. Practical endurance limitations of modern-day fighter aircraft limit their tactical radii (the maximum distances from which aircraft can return unrefueled) to less than five hundred miles. Fighters that take off from Diego Garcia require in-flight refueling from escort tankers on their way to CENTCOM missions. 90 Fighter squadrons therefore take up permanent stations in bases closer to the areas of operations.91

Long-range bombers on missions originating from the island do not require such support. The Air Expeditionary Wing's B-52s can reach CENTCOM targets and return without refueling. Bombers based on the island took advantage of their forward location to prosecute targets in Afghanistan after 11 September 2001.92

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The U.S. Naval Computer and Telecommunications Station (NCTAMS) Far East Detachment oversees a small communications suite on Diego Garcia (NCTAMS DET DG). The station broadcasts and relays operational information to units in the region, tracks satellites, and operates shore information-technology services on the island. Shore relay stations still serve a critical function in the U.S. military's worldwide communications. Submarines in the Indian Ocean, for example, establish satellite links while under way and must report and receive real-time intelligence data to accomplish their missions. Satellite dishes on Diego Garcia transmit data to satellites over the Indian Ocean to provide deployed commanders (and those on shore) with the current status and locations of U.S. and enemy forces. Joint operations in the Indian Ocean rely upon secure tactical circuits maintained by NCTAMS DET DG. Its operators perform critical functions for units in the area: they assist in troubleshooting satellite connectivity issues (through geolocation, remote technical advice, and verification of circuit operability), and they enforce strict rules that govern the sharing of scarce satellite bandwidth.

Utilities

Electrical capacity, sewage treatment capacity, and water supply limit the number of assets that can call on Diego Garcia simultaneously. To a lesser extent, units also require compressed air, nitrogen, amine to scrub CO, from the air in submarines, and "controlled pure water" for various shipboard uses. 93 Finally, tended ships and submarines must off-load oily waste generated from lubricating oil leak-off and other sources. (Nuclear-powered ships on deployment normally transport radiological waste on board for transfer to facilities only upon return to home port; thus, facilities for its stowage and disposal are not required at remote locations such as Diego Garcia.) The pier facilities must have hoses and cables, with their fittings and connections, that match American standards. Incompatibility issues sometimes occur at foreign ports, strengthening the appeal to some commanders of the dependable services at a U.S.-operated pier like Diego Garcia. The U.S. military has proven adept at overcoming a variety of tactical challenges of this sort, but the availability of standardized U.S. equipment only reinforces the value of long-term access to Diego Garcia for routine missions.

The waterfront electrical complex draws from the island grid, requiring Air Force, Navy, and Army facilities to share amperage. 94 Should pier configuration change to receive additional units alongside, total electrical capacity will be insufficient to meet demand. 95 This will require surface ships to continue steaming to provide their own electrical power and SSNs to keep their reactors critical, with the electric plant in self-sustaining operation. 96

Sewage from land facilities and shipboard sanitary tanks either drains or is pumped to a single-pool waste-retreatment facility on the island. The resident population is expected to remain constant, but additional naval functions will raise waste treatment facility usage. An upgrade is overdue: a report for FY 2010 military construction Project 182 finds "the sewage lagoon that services the island is [only] marginally treating the sewage" under current loads.

Water treatment also remains problematic. Potable water contains unacceptable levels of trihalomethanes, a contaminant not readily removed by existing facilities. Find Improved filtration systems are needed to raise water quality for use throughout the island and, perhaps more important, service submarines, which observe strict potable-water standards.

Looking Ahead

The coming years will bring additional construction to Diego Garcia, substantively upgrading the existing forward operating naval base. The significant U.S. construction planned for the island—four phased projects totaling around \$200 million—will be the second such effort in the island's history. The first effort, completed in 1986, established the berthing facilities currently in use and

transformed the island from a simple communications facility to its present role as an important support facility in the India Ocean.

The construction program is an outgrowth of two additional requirements laid on the island:

- · To support a nuclear-powered guided-missile submarine (SSGN) with limited repairs, which began in 2011.
- To act as the forward operating base for the submarine tender *Emory S*. Land, transferred from La Maddalena, Italy, to Diego Garcia in 2010.98

The SSGN

SSGNs conduct multimonth special operations missions, calling at Guam for brief refit periods and planned crew swaps. This concept of operations is similar to the type from which the current SSGNs were converted, the Trident ballistic-missile nuclear-powered submarine (SSBN).99 After refit and crew swap, the SSGN conducts additional missions before returning to home port for a longer refit period. This deployment cycle maximizes time at sea, achieving a deployment rate over 70 percent. 100 With parallel deployment schedules, USS Michigan (SSGN 727) and USS Ohio (SSGN 726) will provide constant presence in the Pacific. In the same way, rotation of USS Florida (SSGN 728) and USS Georgia (SSSGN 729) from the Atlantic Fleet will establish coverage in the Indian Ocean. 101

Diego Garcia is the natural choice to host a guided-missile submarine in the Indian Ocean for reasons of security and stability. In terms of security, the SSGN would not need to transit a dangerous choke point to arrive at the island. Basing at Bahrain and Dubai, for example, would require a tricky transit through the busy and shallow Strait of Hormuz. In addition, a fully loaded SSGN makes an attractive and conspicuous target for terrorists. The platform could also face potential harassment by a regional aggressor, such as Iran. The isolated pier at Diego Garcia, therefore, represents a safer alternative to many options closer to likely objectives. The island also provides stability. SSGNs require unique—and therefore expensive—support facilities to load and maintain their vertical-launch systems and special operations forces modules and associated equipment. A flexible and short-term basing structure (facilities at multiple locations throughout the theater) would not afford suitable support for the complex platform. Finally, Diego Garcia contains adequate housing and shore facilities to conduct an in-theater crew swap while the submarine undergoes a three-week refit.

The reasons for bringing SSGNs into the theater itself are even more compelling. The platform exploits an enormous "dwell time" on station and provides two unique capabilities in addition to covert intelligence collection. First, with a full "maximum strike" complement of 154 Tomahawk land-attack missiles (TLAM), the SSGN offers enormous vertical-strike power, twelve times that of an improved Los Angeles-class SSN. The overwhelming cruise-missile support

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represented by the SSGN is a joint enabler for other forces. On its own, one SSGN satisfies the vast majority of the theater-level TLAM requirements of combatant commanders, which frees up TLAM-equipped SSNs and surface ships for other tasks, such as surveillance and interdiction. Commanders are therefore understandably eager to acquire the operational flexibility generated by constant SSGN presence in the region.

Second, the SSGN can be configured for simultaneous strike and special operations forces (SOF) missions. Strike canisters can be converted to accommodate over 60 SOF personnel and their equipment. Advanced SEAL delivery vehicles or dry dock shelters can attach to and detach from missile canisters from which the weapons have been removed. As a result, the submarine can covertly insert a SOF mission close to land and then stand by for strike tasking with the remaining 140 operational TLAMs. In the future the SSGNs may also employ unmanned underwater vehicles for special operations.

Several upgrades were required to permit Diego Garcia to accommodate the SSGN, including installing a pneumatic fender system, dredging Bravo Wharf to accommodate the boat's forty-foot keel depth, and improving waterfront electrical capabilities. 102

USS Emory S. Land

Local political pressure forced the closure of *Emory S. Land*'s previous home port on the Italian island of Sardinia. The compulsory base closure at La Maddalena reinforces concern that "guaranteed access" is a chimera—even on the territory of otherwise reliable NATO allies. The circumstances surrounding *Emory S. Land*'s relocation tell a cautionary tale: local concerns often balloon into unfavorable domestic political conditions that can unhinge even strong basing agreements. The choice of Diego Garcia over other potential homeports demonstrates an appreciation of the island's strategic location. Planners considered a number of options but settled on Diego Garcia even though it was more costly and involved a number of housing upgrades and pier improvements.

A significant number of submarine missions take place east of the Suez Canal. Typically Atlantic submarines coordinate with Combined Task Force 69 in the European Command (EUCOM) and moor alongside a tender in the Mediterranean during the first few weeks of six-month deployments. Thereafter, if critical equipment fails beyond the capability of the ship's force to repair during a CENTCOM mission, either the item must remain out of commission until the boat returns through the canal and visits the tender or a flyaway team must attempt to restore or replace the casualty in Bahrain or Diego Garcia. Neither repair scenario is ideal: one requires a lengthy and expensive transit that could preclude follow-on tasking in CENTCOM, and the other limits the repair team's immediately available resources. ¹⁰⁴ Similarly, if a TLAM-capable unit launches a full salvo, reload is available only at the tender, after a northbound Suez transit.

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As EUCOM missions dwindled, accordingly, the argument to base Emory S. Land at Diego Garcia gained force.

CENTCOM and PACOM will benefit from the enormous capabilities of the tender. Submarine tenders serve as floating shipyards to repair and supply submarines and surface combatants. Specialized personnel—berthed on board the auxiliary ship itself or temporarily assigned in flyaway teams from the United States—can provide virtually any service the tended ship requests, from repair of a small valve to complete replacement of steam piping, electrical cables, pumps, ventilation fans, or components of weapons systems. The tender can also accept transfer of radioactive and hazardous materials that build up on nuclear-powered boats during long at-sea periods. Aside from mechanical and structural repair and maintenance, the tender offers full legal, dental, medical, and assorted other services for shipboard personnel. The tender houses fifty shops that can make and install spares for electronic, metal, or wooden components. Multiple ships can be served, moored along both sides of the tender (if anchored) simultaneously.

Only two submarine tenders exist in the U.S. fleet. USS Frank Cable (AS 40), redeployed to Guam since 1997, serves as the model that Emory S. Land will emulate. After completing a refit overhaul in Bremerton, Washington, that started in February 2008, Emory S. Land arrived at its new Indian Ocean home port in August 2010.

A Contested Space

The United States is not operating alone in the Indian Ocean. America increasingly encounters Indian and Chinese military influence, making it unlikely that it can achieve military predominance in the Indian Ocean theater. The next two sections address, respectively, Indian and Chinese efforts to establish influence in the region.

India and the Indian Ocean

India's strategic orientation toward the Indian Ocean has increased markedly in the past decade. In the time of the Raj, British India managed the empire "from the Swahili coasts to the Persian Gulf and eastward to the Straits of Malacca." 105 When India achieved independence in the wake of the Second World War, senior British officials assumed that the Raj's dominance in the region would pass to the Republic of India. 106 Early Indian strategic thinkers argued, accordingly, that India required a navy that could pick up where the Royal Navy had left off. Keshav Vaidya argued that "the Indian ocean must become an Indian Lake. That is to say India must become the supreme and undisputed power over the waters of the Indian Ocean . . . controlling the waves of that vast mass of water making the Indian Ocean, and its two main offshoots, the Arabian Sea and the Bay of Bengal."107 Historian Kavalam Panikkar echoed the view that India should be

the dominant power in the Indian Ocean, predicting that "the future of India will undoubtedly be decided on the sea." As a result, it was necessary that India exercise control over the Indian Ocean: "While to other countries, the Indian Ocean is only one of the important oceanic areas, to India it is a vital sea. . . . The Indian Ocean must therefore remain truly Indian." 109

Despite these expectations and entreaties, the country took a different route following independence. India's political leaders turned their strategic attention northward to the threats posed to India's territory by Pakistan and China. In an environment where a focus on economic growth constrained the size of the defense budget, the Indian army and air force received shares of military expenditures double that of the navy. Instead of blue-water operations as envisioned by Vaidya and Panikkar, the navy's role in India's defense plans was to support army operations on land against Pakistan. The idea of controlling, let alone dominating, the Indian Ocean was ignored for decades.

Neglect of the Indian Ocean came to an end in the late 1990s, when the right-of-center Bharatiya Janata Party government launched an ambitious program of naval acquisition paired with a "forward-leaning" foreign policy that sought to cement India's access and political leverage across the littoral region from East Africa to the Asia-Pacific. These political and economic developments were tied to a renewed appreciation of the value of maritime power to an emerging power. India's 1998 Strategic Defense Review argued that "the Navy must have sufficient maritime power not only to be able to defend and further India's maritime interests, but also to deter a military maritime challenge posed by any littoral nation, or combination of littoral nations of the Indian Ocean Region, and also be able to significantly raise the threshold of intervention or coercion by extra-regional powers."

In April 2004 the Indian navy released its first doctrinal publication, India's Maritime Doctrine. According to this document, "for the first quarter of the 21st century [India] must look at the arc from the Persian Gulf to the Straits of Malacca as a legitimate area of interest."112 Indian naval strategists are staking an explicit claim to the legacy of the British Empire as identifying the natural boundaries of India's influence. The 2004 doctrinal document notes explicitly the link between maritime power and the protection of economic interests. In terms of concrete tasks, protecting India's maritime economic interests requires that the navy be able to carry out sea-denial missions throughout the country's expansive exclusive economic zone (EEZ). To protect the valuable SLOCs that carry India's trade and energy resources, the navy requires the capability to exercise sea control out to the perimeter of the Indian Ocean littoral. The doctrine describes explicitly the means by which India can control these SLOC-based trade routes. It emphasizes in particular the importance of dominating important islands and maritime choke points. Such actions are not merely defensive measure. Their coercive value is explicitly noted: "Control of these choke points could be a useful bargaining

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chip in the international power game."113 India's growing maritime capabilities and expanding strategic vision suggest a desire to be the dominant naval power in, if not the regional hegemon of, the entire Indian Ocean littoral. 114

India's focus on the Indian Ocean is driven by three interrelated factors: geography, economics, and concern about extraregional actors. India's landmass protrudes into the ocean at its midpoint. This places India adjacent to the primary maritime trade routes that link the Strait of Hormuz, the Arabian Sea, and the Horn of Africa, on one hand, with the Bay of Bengal and the Strait of Malacca, on the other. A substantial portion of the country—nearly 3,500 miles of coastline physically touches the Indian Ocean. To this must be added a host of island chains and atolls in both the Arabian Sea and Bay of Bengal that add an additional 1,300 miles of coastline. 115 Altogether this provides India with a massive EEZ of 2.54 million square miles—nearly 10 percent of the Indian Ocean's total area. 116

The sustained economic growth that India has experienced over the past fifteen years has given it sufficient wealth and power to start considering its security interests beyond South Asia.117 At the same time, economic growth and the need to sustain it require that India focus increasingly on the Indian Ocean littoral, on which India's continued economic growth will depend heavily. In recent years, official statements have underscored increasingly the importance India attaches to energy security, which "is vital for an assured high rate of [economic] growth."118 India's oil consumption is expected to double by 2025, which would make it the world's third-largest energy consumer, after the United States and China. 119 Roughly 30 percent of India's oil and gas comes from offshore fields in the Bombay High and Krishna-Godavari Basins. 120 However, India imports more than half of its natural gas and 70 percent of its oil, the supermajority of which comes from the Persian Gulf. With roughly 90 percent of its external trade by volume and 77 percent by value traveling by sea, it is not surprising that the security of shipping lanes in the Indian Ocean is a major concern for India. Indeed, a host of observers have argued that India's economy is "at the mercy of the power which controls the sea."121

India's extended neighborhood offers significant opportunities for beneficial economic engagement. India considers the Persian Gulf region to be not only a source of energy but, in the words of Prime Minister Manmohan Singh, "part of our natural economic hinterland."122 The importance of the Persian Gulf/North Africa to India's economy generally can be seen in the fact that the UAE is India's third-largest trading partner while the combined region as a whole accounts for more than 20 percent of India's exports and nearly 30 percent of its imports.¹²³ At the opposite end of its extended neighborhood, India's focus is driven by economic engagement with Southeast Asia. During 2007-8 Indian trade with the Association of Southeast Asian Nations (ASEAN) reached \$40 billion. 124 As of early 2009 the ASEAN countries as a whole accounted for 11 percent of India's exports and 9 percent of its imports.125

The need for India to secure its own interests in the Indian Ocean littoral points to the third and final factor driving India's attention to the region-concern about extraregional actors. While some Western scholars have argued that New Delhi desires primacy or hegemony in the Indian Ocean, Indian analysts suggest that it instead seeks, more modestly, to develop the capability to "balance the influence of other powers and prevent them from undercutting" India's interests in this zone. 126 The latter goal is significantly more achievable in the near term because while India's navy ranks as the world's fifth largest, it is currently contracting as obsolete ships leave service faster than they are being replaced, albeit by more capable modern platforms. The present fleet is built around the aging aircraft carrier INS Viraat, which is supplemented by fewer than 60 surface combatants-many of them at the end of their service lives-and more than a dozen diesel-electric submarines. The navy's ambitious goal is to have a "160plus ship navy, including three aircraft carriers, 60 major combatants, including submarines, and close to 400 aircraft of different types" by 2022.127 However, even this fleet would possess only a modest ability to project Indian power to the farthest reaches of the Indian Ocean or to influence military operations on land. At present, India's naval capabilities allow it to defend its territorial waters and police the sea-lanes of the northern Indian Ocean; they would need to be significantly greater to achieve primacy in the littoral region or to deter the unwanted interventions of extraregional actors.

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The issue of extraregional actors in the Indian Ocean is particularly acute for New Delhi because, as the 2004 Indian maritime doctrine predicts, all "major powers of this century will seek a toehold in the [Indian Ocean region]."128 India has long sought to preclude other powers from gaining a lasting presence in the Indian Ocean, a goal that assumes added force in light of the popular belief that India lost its independence when it lost control of the Indian Ocean in the sixteenth century. 129 Since the end of the Cold War, China has replaced the United States as the extraregional actor of primary concern. There is long-standing friction in the relationship between New Delhi and Beijing. The 1962 war between the two countries inflicted a humiliating defeat on India and created a yetunresolved border dispute; furthermore, China has been a principal supplier of weapons technology, both conventional and nuclear, to Pakistan, India's South Asian bête noire. Moreover, China's perceived efforts to establish a network of ports and partnerships with countries in the littoral region—including in several nations that have traditionally been hostile to India—are viewed by some as part of a coherent strategy to encircle India and confine its influence to South Asia. 130

The goal of this strategy would be to maximize access to resource inputs and economic growth in peacetime while making it politically difficult for hostile naval powers to sever seaborne energy supplies in times of crisis. To the west, China is financing and building a major deepwater port complex for Pakistan at Gwadar. ¹³¹ Some Indian media sources claim that the People's Liberation Army

Navy (PLAN) will have access to this facility, which will give it a strategic position in the Arabian Sea, close to the mouth of the Persian Gulf. A Singaporean journalist speculates that Gwadar will help China "to monitor American military movements from Diego Garcia."132 To the east, Indian sources allege, the Chinese military has assisted Burma with the construction of several naval facilities on the Bay of Bengal—particularly at Kyaukpyu and Hainggyi Island. 133 As with Gwadar, it is presumed in the Indian press that these facilities are being upgraded to serve China's needs in a future military contingency. However uninformed by existing facts on the ground, such concerns reflect apprehension over the PLAN's ongoing expansion, which is viewed as a possible threat to India's strategic interests in the region. 134

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India's attitude toward the U.S. presence in the Indian Ocean in general, and the base at Diego Garcia in particular, has evolved significantly since the end of the Cold War. In the wake of the British withdrawal from "East of Suez" in 1968, India sought to make the Indian Ocean "a zone of peace from which great power rivalries and competition, as well as bases concerned in the context of such rivalries and competition either army, navy, or air force, are excluded."135 Prime Minister Indira Gandhi made it clear that India was "opposed to the establishment of foreign military bases, and believed that the Indian Ocean should be an area of peace, free from any kind of military base." 136 In keeping with the pro-Soviet orientation of the "nonalignment" policy pursued by the Gandhi government, the joint British-U.S. facility at Diego Garcia was a particular target of left-leaning politicians from the Congress Party while similar Soviet facilities at Berbera in Somalia were largely ignored. 137 In the words of one Indian foreign minister, Diego Garcia "epitomized U.S. imperialistic tendencies and neocolonial policies."138

Indian hostility to Diego Garcia stemmed in part from the assumption that the establishment of a U.S. naval facility indicated that American naval power would be a permanent fixture of the region. Again, successive Congress governments, which dominated Indian politics throughout the Cold War period, characterized American naval power as a significant threat to regional peace while largely ignoring the Soviet navy's deployment to the region. 139

The collapse of the Soviet Union in 1991 and the subsequent reorientation of India's economic and foreign policies created the opportunity for significant improvements in Indo-American relations. A recognition of common interests and concerns in areas ranging from securing the free flow of commerce to halting the spread of radical Islam have led to enhanced economic and security ties between the two nations. This improved relationship culminated in the George W. Bush administration's declared policy to "help India become a major world power in the 21st century."140

Indian attitudes toward American naval power in the Indian Ocean have adjusted accordingly. Indian strategists recognize that the United States will

remain the world's preeminent economic and military power for at least the next several decades. As such, American power will likely be committed to defending the status quo in the international system—thereby also defending the stability India requires to sustain its own economic development. In the context of the Indian Ocean, U.S. military presence is now seen as a stabilizing factor in an otherwise fragile region.

In addition, there appears to be a recognition and acceptance by the Indian government that Diego Garcia is an important and permanent hub for U.S. power projection in the Indian Ocean littoral. As evidence that India has lost its aversion to the "neocolonial" Anglo-American facility, in 2001 and again in 2004 the Indian navy participated in combined exercises with the United States at Diego Garcia. Furthermore, there have been suggestions that the Indian government has encouraged Mauritius to reach a final settlement on the sovereignty of the Chagos Archipelago that would allow for the continued presence of the British/American facility at Diego Garcia. ¹⁴¹

The absence of criticism of Diego Garcia and U.S. military presence in the region has been notable at a time when military operations against violent extremism have brought a significant increase in U.S. forces in Central Asia and the Horn of Africa region as well as a significant use of the air and naval facilities at Diego Garcia. For example, in June 2007 the nuclear-powered aircraft carrier USS Nimitz (CVN 68) made a port call at Chennai. In accordance with American policy, Nimitz refused to confirm or deny that it carried nuclear weapons. While the transit of nuclear weapons through the Indian Ocean by external powers had been a major issue for New Delhi in the past, the Nimitz visit was notable for the lack of objection by the left-leaning government, by this time the Congress Party-led United Progressive Alliance coalition. When a small group of Indian intellectuals released a letter decrying the "reversal of past policy opposing the transit of nuclear weapons in its neighbourhood and the U.S. base at Diego Garcia, and its demands for a 'zone of peace' in the Indian Ocean," they were dismissed by the Times of India as "purveyors of selective indignation" who were motivated by pious anti-Americanism rather than logic.142 This is a marked change from the Indian rhetoric of the 1960s, 1970s, and 1980s.

Although India ultimately seeks strategic autonomy in its foreign affairs, New Delhi has looked favorably, in light of these latter developments, on its strategic ties with Washington as a means to reinforce its position in the Indian Ocean. Given the U.S. ability to base substantial air assets at Diego Garcia and to deploy naval forces from the Gulf and the Pacific to the Indian Ocean, there is recognition that American presence in the littoral can complement India's quest for a peaceful and stable regional order.

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