In late 2013, China launched a massive campaign of land reclamation and construction on the seven reefs it already occupied in the Spratly Islands. Dredgers, barges, and work crews began expanding four Chinese outposts between December 2013 and May 2014. After exposing Beijing’s activities, the Philippines and the United States called for a universal moratorium on reclamation, construction, and other coercive actions in the region. The proposal, however, fell on deaf ears. Vietnam was engaged in numerous, albeit smaller, garrison upgrades in the Spratlys at the time. The rest of ASEAN was unwilling to take a public stance against Beijing. Following the failure of this proposed construction freeze, China accelerated the pace of reclamation and broke ground on its three largest projects between August 2014 and January 2015. International criticism grew as their enormous scale became clear. When ASEAN issued its first critical joint statement, Beijing pivoted rhetorically to underscore its new bases’ civilian functions. Between June and September 2015, Chinese leaders then announced the end of large-scale land reclamation and declared that they had no intention of militarizing the Spratlys. Yet the construction of dual-use facilities continued. The U.S. Navy restarted a freedom of navigation program in October 2015 near some of the reclaimed reefs. The PLA Navy shadowed and protested these naval patrols but did not attempt to interfere with them directly.
The Spratly Islands (known as the Nansha, Kalayaan, or Truong Sa Islands) are an archipelago of hundreds of small islands, shoals, cays, and reefs in the South China Sea. China, Taiwan, and Vietnam claim sovereignty and jurisdiction over the entire chain and its surrounding waters while the Philippines, Malaysia, and Brunei assert rights to smaller portions. The islands have no indigenous population, so states have exerted control in the Spratlys through the construction of military outposts. These garrisons help claimants establish presence, assert claims, and monitor the activities of rivals. Accounting methods differ, but by one measure Vietnam currently occupies 27 different features, the Philippines 9, China 7, Malaysia 5, and Taiwan one feature.

Although navigators, fishermen, and others have frequented the Spratlys since antiquity, there is little evidence of any state exercising effective administration over the islands until the twentieth century. French colonial authorities in Vietnam briefly seized and annexed several large features in the early 1930s. Japanese troops evicted and replaced this occupation in 1939 during the Second World War. Following Tokyo’s defeat in 1945, the United States initially aimed to place the islands of the South China Sea under United Nations trusteeship or perhaps even support the Republic of China’s claims to them. However, France’s enduring interest in the region ultimately led Washington to avoid taking a clear position. As a result, Japan was forced to renounce its claims at the 1951 San Francisco Peace Conference. The treaty failed to name a sovereign successor for the Spratly and Paracel Islands.

In 1956, a Filipino businessman announced he was annexing much of the archipelago, driving Taiwan to permanently garrison the largest island in the group, Itu Aba. Other claimants followed suit with several waves of occupation. By 1978, the Philippines had garrisons on five different islets. Malaysia occupied three features in 1983 and 1986, and Vietnam garrisoned around 21 by 1988. That year, China occupied several features in the Spratlys for the first time, sparking a brief naval clash with Vietnam. Yet by the time Beijing arrived on the scene, all of the largest islands, shoals, and cays had already been seized by other disputants. China was only able to take six previously unoccupied semi-submerged coral reefs and rocks. Vietnam garrisoned another six features between 1989 and 1991, and China seized Mischief Reef in 1994. Finally, in 1999 Malaysia took two reefs and the Philippines occupied Second Thomas Shoal.

After years of negotiations, China and the Association of Southeast Asian Nations finally signed the Declaration on the Conduct of Parties in the South China Sea in 2002. This legally nonbinding document urges all disputants to “exercise self-restraint in the conduct of activities that would complicate or escalate disputes and affect peace and stability including, among others, refraining from action of inhabiting on the presently uninhabited . . . features.” This was generally interpreted as a commitment to maintain the status quo, but it does not explicitly preclude outpost upgrades like land reclamation, construction, or military emplacements. Most claimants have reclaimed land on features they occupy in Spratlys, with Taiwan, Vietnam, and now China having done so since 2002. All claimants have engaged in construction since 2002.

The Philippines reclaimed some 14 acres of new land in the 1970s and 1980s to support a runway extension at Thitu Island. In 2002, over 100 Filipino settlers established a civilian colony there with state support. At some point since, the Philippines built new structures on the previously
uninhabited Loaita Cay/Loaita Nan and possibly another Spratlys feature. Prior to this, Loaita Cay/Loaita Nan had only been monitored by a “virtual garrison” on nearby Loaita Island. In 2013, Manila constructed new support buildings at four outposts and cleared a road around Thitu. Malaysia also completed its modernization of Layang-Layang Airport in 2013 at Swallow Reef. Kuala Lumpur then refurbished two air hangars and added a new building and water storage facility in 2013. In total, Malaysia has reclaimed about 70 acres, mostly while constructing facilities on Swallow Reef in the 1980s.8

Vietnam began modernizing its own runway in 2004 on Spratly Island (“Big Spratly”). Between 2011 and 2015, Hanoi reclaimed five acres at Sand Cay and 16 acres at West Reef. New facilities and defensive structures were also added. These reportedly included artillery and shoulder-fired anti-aircraft missiles. From 2009 to 2014, radar and communications equipment were added at 15 outposts, quality-of-life improvements at 19, point defenses at 18, new helipads at 6, and civilian infrastructure improvements at 5 outposts. By 2016, Vietnam had created 120 acres of new land at 10 different features in the Spratlys. This includes Cornwallis South Reef, which had been fully submerged and is beyond Vietnam’s continental shelf claim. For this reason, the U.S. Department of Defense called Vietnam “the most active claimant in terms of both outpost upgrades and land reclamation” prior to China’s recent campaign of island building.9

Taiwan also began constructing a new airfield on Itu Aba in 2006 (completed in 2008). In 2013, Taipei installed 40-millimeter cannons and 120-millimeter mortars while also adding eight new acres of reclaimed land. This construction supported a $100 million port capable of accommodating large surface combatants and coast guard vessels.10 Until its recent land reclamation campaign, Beijing had only made fairly limited improvements to its seven features, occupying them between 1988 and 1994. This included some multistory facilities, communications and radar towers, piers, and defense emplacements. Fiery Cross Reef functioned as a logistical base for supplying the other garrisons, and in 2013 vessels from the PLA Navy and China Coast Guard also began operating more frequently from Mischief Reef. China then administered less landmass than any claimant other than Brunei. It was also the only party lacking an airstrip in the Spratlys despite the 500 miles between China’s Hainan Province and the island group.11

China’s large-scale land reclamation has complex legal implications. In July 2016, a specially constituted arbitral tribunal ruled that three of the seven features China occupies (Hughes Reef, Mischief Reef, and Subi Reef) were naturally above water only at low tide, and the other four (Johnson South Reef, Fiery Cross Reef, Gaven Reef, and Quarerlon Reef) were mere “rocks” not entitled to significant maritime rights.12 Under the 1982 UN Convention on the Law of the Sea, those three low-tide elevations do not generate entitlements to a territorial sea, exclusive economic zone, or continental shelf. There is an exception for cases like Subi and Hughes Reef where a low-tide elevation is located within a different feature’s territorial waters. Unlike full islands, China’s four rock features only generate rights to a territorial sea because they “cannot sustain human habitation or economic life of their own.” Importantly, human construction cannot upgrade the legal status of land features and their attendant entitlements to maritime rights. Wholly artificial islands like Mischief are only entitled to a 500-meter “safety zone.”13

(continued)
To date, China has declined to clarify many of its South China Sea claims in the specific language of the Law of the Sea regime. Although Beijing has confirmed that it believes the Spratlys are entitled to territorial waters, an exclusive economic zone, and a continental shelf, it has yet to issue any baselines for the archipelago. China also frequently invokes “historical rights” in the South China Sea that have no clear basis in 1982 Convention.14


## Timeline

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<td>May</td>
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Incident Details

Phase I: China Begins Land Reclamation Operations

In 2012, the China State Shipbuilding Corporation, one of China’s two largest naval architecture conglomerates, released provisional templates for the construction of artificial islands in the South China Sea. The state contractor published three-dimensional computer-generated imagery on its website, but later took the images down because they were "too sensitive." The plans received no media coverage at the time; they resurfaced in 2014 after China’s land reclamation activities began to gain international coverage. These blueprints depicted a low-lying manmade island built atop a submerged coral reef. It featured a fully functioning runway, small port, fuel and water storage facilities, floating work platforms, wind turbines, greenhouses, paved roads, personal cars, living quarters, and transplanted vegetation. Chinese maritime experts later disclosed that groups had drafted such proposals for several years. Only Beijing’s reluctance to "cause too much controversy" up to that time had prevented implementation.

China commenced land reclamation operations in the Spratly Islands in late 2013. Using marine traffic data collected by ship transponders, observers pinpointed the Tianjing dredger’s arrival date at Cuarteron Reef as September 9, 2013. Operated by state-owned Tianjin Dredging, a subsidiary of the China Communications Construction Company, the Tianjing is a 417-foot-long, self-propelled cutter suction dredger. It was designed by a German engineering firm and Shanghai Jiaotong University and was built by the China Merchants Heavy Industry Yard in Shenzhen between 2008 and 2010. Costing $130 million per unit, it is the third largest dredger in the world and the largest in Asia. Unlike other conventional dredgers, the Tianjing has its own propulsion system, so it does not need to be towed by another vessel. It operates at an extraction rate of 160,000 cubic feet per hour by deploying a rotating cutter head to the seabed to a depth of up to 100 feet and depositing clay, compacted sand, gravel, rocks, and seawater directly ashore through a floating pipeline or into split hopper barges moored alongside.

The Tianjing lingered at Cuarteron Reef from September 9 to September 28 but did not undertake any land reclamation. It was next sighted at Fiery Cross Reef from December 7 to December 14 before arriving at Johnson South Reef on December 17. From December 2013 through March 2014, the dredger operated at Johnson South Reef, which became the first Chinese land reclamation site. The first commercial satellite imagery of these activities was taken on January 22, 2014. Reclamation was already well under way. At the time, the Tianjing dredger, a hopper barge,

and other support vessels were inside the reef while a PLA ship guarded the operation outside the shoal.\(^4\) On February 25, a Philippine reconnaissance aircraft photographed the dredger piling sand on the reef through a floating pipeline. Later imagery indicates that the *Tianjing* completed its primary land reclamation mission at Johnson South by March 3, having created a new harbor and 27 acres of new land in less than three months.\(^5\) Other Chinese support vessels began shaping this reclaimed sediment soon afterward.\(^6\)

On March 4, 2014, the *Tianjing* returned to Cuarteron Reef and began land reclamation. Commercial satellite imagery had previously captured large numbers of civilian Chinese fishing vessels at this and other features creating large plumes of sand as they reportedly harvested coral and endangered giant clams, damaging much of the reef in the process. The *Tianjing* left on March 8 but then returned to Cuarteron from April 10 to May 22, creating 61 acres of new land.\(^7\)

After stopping again at Fiery Cross, the *Tianjing* next began operations at Hughes Reef on March 20 (initial work at Hughes Reef may have actually begun two months earlier). Commercial satellite imagery taken on March 28 depicts the dredger and two small support vessels, with a channel having already been cut through the coral reef to support the construction of a larger port complex. The *Tianjing* had just begun dumping sediment near the existing Chinese outpost. Beijing would eventually add 18 acres of new land to what had been a low-tide elevation. By the time the dredger departed on April 3, the Chinese state company had undertaken substantial reclamation activity at three Chinese-held reefs.\(^8\)

**Phase II: Moratorium Proposals Fail to Gain Traction**

Initial Chinese land reclamation operations took place without public attention. Philippine maritime reconnaissance aircraft had spotted Chinese dredgers at work in March while taking part in international search efforts for missing Malaysia Airlines Flight MH370. Others reports suggest Manila spotted the Chinese reclamation effort at Johnson South Reef as early as December 2013. On April 4, 2014, just one day after the *Tianjing* dredger departed Hughes Reef, Manila filed its first diplomatic protest with Beijing over land reclamation at Johnson South. Philippine officials may not yet have been aware of Chinese activities at Hughes or Cuarteron Reefs, which their note


\(^6\) Imagery dated April 5, 2014 at “Johnson Reef Tracker,” Asia Maritime Transparency Initiative.


verbale failed to mention. Beijing rejected the protest and defended its freedom to build on islands and reefs over which it claimed sovereignty.9

On May 10, the Philippines formally updated the Association of Southeast Asian Nations on China’s activities during the 24th ASEAN Summit in Myanmar. The week prior, the South China Sea Research Forum had posted a dozen photographs of reclamation and construction at Johnson South Reef. These images showed a PLA Navy frigate and landing tank ship guarding the operation.10 Philippine president Benigno Aquino found an ally at the summit in Vietnamese prime minister Nguyen Tan Dung, whose maritime forces were then in a tense standoff with Beijing over the deployment of an oil rig to disputed waters near the Paracel Islands. The ASEAN foreign ministers’ joint statement on the South China Sea, however, reflected the host’s close ties to Beijing. It did not name China or single out its land reclamation for criticism.11

Manila then initiated efforts to impose a reputational cost on China for its land reclamation. On May 14, the Philippine Department of Foreign Affairs announced that China had begun significant land reclamation and construction at Johnson South Reef. Foreign Secretary Albert del Rosario suggested the possibility of China building an airstrip there, although the Department of National Defense was skeptical.12 Government sources estimated that Chinese dredgers had reclaimed 74 acres at Johnson South, nearly three times the actual figure. Manila also released photographs that Philippine surveillance aircraft had taken of Johnson South Reef. The accompanying statement called Chinese actions “destabilizing” as well as a violation of the 2002 China-ASEAN Declaration and international law. The Department of National Defense called on Beijing to “immediately stop . . . provocative acts.”13 Presuming that China was building new bases “for military purposes,” the Department of Foreign Affairs accused Beijing of hypocrisy in criticizing Manila’s own efforts to consolidate the Second Thomas Shoal outpost. Finally, a spokesperson from the president’s office stated that these revelations reinforced the wisdom of Manila’s decision to file its South China Sea arbitration case.14

The Chinese Ministry of Foreign Affairs confirmed the reports about Johnson South but insisted that “whatever construction China carries out . . . [is] entirely within the scope of China’s sovereignty.” On May 19, President Aquino reiterated that Chinese land reclamation was a violation of the 2002 China-ASEAN Declaration, but admitted that “this code is not binding, not enforceable.”

Aquino declared his intention to push for a binding Code of Conduct between ASEAN and China at the earliest possible juncture.\(^{15}\)

China soon commenced reclamation operations at a fourth site. On May 22, the *Tianjing* dredger left Cuarteron Reef and traveled to Gaven Reef, where it remained until June 15. Around this time, observers discovered that Beijing was expanding not just Johnson South Reef but multiple other outposts. The Philippine military reportedly observed the *Tianjing*, two other dredgers, and a large tugboat at Gaven Reef. These ships ultimately dredged 36 new acres of land at Gaven Reef. Chinese sources estimate that the *Tianjing* alone blasted more than 350 million cubic feet of sand and seawater onto these four features between September 2013 and June 2014.\(^{16}\)

The United States weighed in for the first time at the annual Shangri-La Dialogue, when on May 31, 2014, Secretary of Defense Chuck Hagel censured China’s recent maritime behavior, specifically criticizing “land reclamation activities at multiple locations.” Secretary Hagel reiterated the United States’ neutrality with respect to underlying sovereignty claims, but noted Washington’s firm opposition to “any nation’s use of intimidation, coercion, or the threat of force to assert those claims.”\(^{17}\)

Manila publicly commented on the additional sites in June. On June 6, President Aquino expressed concern “that there seems to be development in other areas within the disputed seas.” Military officials informed the media that these newly observed reclamation projects included Cuarteron and Gaven Reefs. The Department of Foreign Affairs filed diplomatic protests with the Chinese embassy over these features, and shortly thereafter over dredging at Hughes Reef.\(^{18}\) That same week, Chinese experts reported that Beijing was planning a massive expansion of Fiery Cross Reef. It would become a fully formed artificial island with an airstrip and port. The central government was said to be considering a proposal based on China’s experience thus far at Johnson South Reef. According to media reports, this led Manila to conclude that Beijing would begin its next reclamation at Fiery Cross Reef or Subi Reef—perhaps delaying the start of operations at Mischief Reef given its proximity to the main Philippine archipelago.\(^{19}\)

Despite its diplomatic challenges, Manila had no intention of confronting China at sea. The Department of Foreign Affairs pledged to lodge protests in response to additional reclamation, but a presidential spokesperson acknowledged that the Philippines would “not respond to provocative action, especially [through] military action.” Instead, Manila would pursue an asymmetric strategy.

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\(^{19}\) “China Plans Artificial Island in Disputed Spratlys,” *South China Morning Post*; Ana, “China Reclaiming Land in 5 Reefs.”
relying on multilateral diplomacy and international legal mechanisms. To this end, on June 16 Secretary del Rosario called for all claimants in the South China Sea to embrace a “moratorium” on coercive activities, including construction and reclamation. Del Rosario hoped this freeze would facilitate the conclusion of a binding Code of Conduct. The same day, the Vietnamese foreign ministry called on China to immediately stop “illegal activities of expansion and construction” and “withdraw its vessels and facilities” from the Spratly Islands. Hanoi’s statement, however, did not include a pledge to halt its own land reclamation and construction activities. Beijing immediately rejected these “totally unreasonable” attempts to restrict “China’s appropriate moves within the scope of [its] sovereignty.”

On July 11, the United States championed the proposed moratorium, with Deputy Assistant Secretary of State Michael Fuchs floating the idea of a voluntary freeze on “certain actions and activities that escalate the disputes and cause instability.” Such a freeze would have applied to the establishment of new outposts or the seizure of other claimants’ outposts. Importantly, the United States also encouraged opposition to construction and land reclamation that “fundamentally change the nature, size, or capabilities” of existing outposts, “whereas routine maintenance operations would be permissible.” Under the U.S. proposal, claimant states would refrain from interfering with “longstanding economic activities . . . in disputed areas” such as commercial fishing. The State Department had already begun lobbying claimants to adopt this voluntary freeze, but U.S. officials suggested that the claimants “should get together to decide the parameters of a freeze.”22 A Chinese foreign ministry official responded to these remarks on July 15. Rather than opposing the U.S. suggestion outright, Beijing criticized the “construction work and weaponry buildup over recent years” by other claimants. Beijing also highlighted its commitment to move forward on negotiation of a Code of Conduct with ASEAN, for which official consultations had begun in September 2013.23

The U.S. and Philippine campaign for a construction freeze intensified ahead of the annual ASEAN Regional Forum. On August 1, the Department of Foreign Affairs of the Philippines issued a “Triple Action Plan” that centered on an immediate moratorium, followed by the ASEAN-China Code of Conduct, with a final resolution of the South China Sea disputes through international arbitration. The Philippines asserted that Vietnam, Brunei, and Indonesia had all “expressed support for this initiative,” but these countries did not confirm this claim in public.“24 Beijing rejected this proposal

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Michael Green, Kathleen Hicks, Zack Cooper, John Schaus, and Jake Douglas

and stated that “what China does or doesn’t do is up to the Chinese government” alone. An official accused other claimants of applying a double standard by criticizing Chinese activities but “when other countries wantonly build airports, nobody says a word.” The official also dismissed reports about Beijing’s plans to build an airfield at Fiery Cross Reef and argued that China was simply conducting “small and necessary construction, to raise living conditions on the islands.”

The United States and the Philippines lobbied hard at the ASEAN Regional Forum that started a week later on August 8. Secretary of State John Kerry went over the details of the U.S. proposal and also backed Secretary del Rosario’s Triple Action Plan. Yet ASEAN largely ignored the initiatives and the chairman’s statement did not mention land reclamation or express support for the plan. The ASEAN secretary-general, Le Luong Minh of Vietnam, stated that the group did not even discuss the U.S. proposal. This did not mean the ASEAN member countries did not support “the essence of the proposal of the U.S.,” Minh argued, but “it is up to ASEAN to encourage China to achieve a serious and effective implementation of this commitment.” Vietnam and others preferred to work through existing mechanisms and ongoing official consultations with Beijing. In a press conference, Chinese foreign minister Wang Yi said he would be willing to endorse the first two steps of the Philippines’ plan, but only if Manila first abandoned its pursuit of international arbitration. He noted that the Philippines had actually “jump[ed] the first two steps to go directly to the third step.”

Despite a concerted U.S.-Philippine effort, the proposed moratorium on construction and reclamation had been scuttled.

**Phase III: Beijing Starts Dredging Three Largest Bases**

In August 2014, China justified concerns about additional land reclamation. On August 8, 2014, commercial satellite imagery captured a Chinese dredger working on Fiery Cross Reef. Initial imagery depicted just one dredger, but these numbers quickly jumped to three dredgers by September and to at least six by November, along with a host of barges and support vessels. This project was far greater in scale and complexity than the work done before. Whereas Chinese civilian crews had added less than 150 acres total to the other four outposts, Beijing transformed

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all of Fiery Cross Reef into an artificial island. China ultimately reclaimed some 665 acres at Fiery Cross. Two dredgers in particular, a grab dredger and a cutter suction dredger, were instrumental in this work.30

Beijing largely concluded reclamation at Johnson South, Quarteron, Hughes, and Gaven Reefs by fall 2014. Satellite imagery showed fully dredged channels, port facilities, and seawalls, as well as initial infrastructure development already underway at all of these outposts. Cement-pumping trucks, cranes, large steel pipes, and welding equipment were also observed.31 PLA Navy chief Admiral Wu Shengli reportedly visited all five sites sometime in September, providing further evidence that Chinese leaders were providing strategic direction.32

In November, Chinese activities at Fiery Cross Reef gained significant media attention. Imagery of extensive reclamation work led to suggestions that the new artificial island would be large enough to host a full runway, as well as a harbor large enough for tankers and large surface combatants. This report generated attention in major U.S. and international newspapers.33 On November 22, a U.S. Department of Defense spokesperson confirmed the United States’ own assessment that China was “working toward” building an airstrip on Fiery Cross Reef. Washington called on China to “stop its land reclamation program and engage in diplomatic initiatives to encourage all sides to restrain themselves.”34

Around this time, Beijing stopped arguing that it was merely improving living conditions and instead began to emphasize the new facilities’ value for international “search, rescue, and other public services.” At the Xiangshan Forum in Beijing, a Chinese officer stated that the search for MH370 had “made us realize we lack sufficient air force capabilities in the South China Sea.” Fiery Cross Reef would “support our radar system and intelligence-gathering activities” and improve China’s ability to maintain “state security and protect [its] national interests.”35


China then began two new, massive reclamation projects at the beginning of 2015. Imagery taken on January 25 showed multiple dredgers at both Mischief and Subi Reefs. Like Fiery Cross Reef, the extent of Chinese land reclamation at Mischief and Subi was orders of magnitude larger than that at Gaven, Hughes, Johnson South, and Cuarteron. These two projects were even larger than Fiery Cross, with approximately 1,408 acres of new land at Mischief Reef by September 2015 and 1,014 acres at Subi Reef by October 2015. These enormous operations involved at least two dozen dredgers at Mischief Reef alone, plus dozens of other barges and support craft. The Philippines publicly disclosed the new projects in the spring.

Regional condemnation of China’s island building campaign continued to grow. Philippine secretary of defense Voltaire Gazmin reportedly ordered the military to “prepare for territorial defense,” but a January 21, 2015, U.S.-Philippines Bilateral Security Dialogue made clear that the two allies would eschew direct confrontation with Beijing in favor of heightened support for Manila’s defense modernization program, joint maritime exercises, and foreign military financing. Foreign Secretary del Rosario later acknowledged that the Philippines had no plan for any direct interference with China’s land reclamation or construction operations.

On January 27, criticism of Chinese activities appeared to coalesce at the ASEAN Foreign Ministers’ Retreat in Malaysia. According to Singaporean foreign minister K. Shanmugam, “a number of countries raised the issue . . . [of] land reclamation” at the retreat. As host and ASEAN chair for 2015, Malaysian foreign minister Anifah Anan also announced that he and his counterparts had decided to “intensify efforts towards achieving the full and effective implementation of the Declaration on the Conduct of Parties in the South China Sea and work vigorously towards the early conclusion of the Code of Conduct.” To this end, Anifah instructed officials to “increase the frequency” of consultations. The Malaysian foreign minister noted explicitly “the concern raised by some foreign ministers on land reclamation in the South China Sea.” Vietnam again pushed for an immediate halt to Chinese land reclamation without any pledge for a moratorium on other claimants’ activities.

In response, a Xin hua commentary singled out the Philippines as a “crying baby” that was “putting up another pathetic show in an attempt to lobby international sympathy and support in its territorial spat with China.” A government spokesperson then justified China’s “construction and infrastructure maintenance” as “legitimate and conducted in accordance with international law.” In February, Manila lodged another diplomatic protest over reclamation at Mischief and construction activities at Fiery Cross. Singapore also issued a joint statement with the United States urging all parties to exercise self-restraint in the South China Sea. It did not join the Philippines and Vietnam in calling for China to halt its activities.

Phase IV: Engages Diplomatically as Primary Reclamation Ends

In March 2015, Beijing issued a senior-level statement on land reclamation in response to growing regional pressure for the first time. Foreign Minister Wang Yi addressed the issue on March 8, arguing that China was merely carrying out “lawful,” “justified,” and “necessary” construction “in our own yard” that “does not target or affect anyone.” He made clear that Beijing would not bow to criticism from countries “who engage in illegal construction in another person’s house” and vowed that China’s activities would not affect freedom of navigation or its policy of seeking peaceful resolution to disputes.

As China’s reclaimed islands grew, so too did domestic political pressure in the United States. On March 19, the Republican and Democratic leaders of the Senate Armed Services and Foreign Relations Committees issued a joint letter calling for a “formal strategy” to oppose “China’s coercive peacetime behavior.” The senators recommended that Washington employ “specific actions” to “slow down or stop China’s reclamation.” Shortly thereafter, reports revealed that the Defense Department had begun considering plans to send U.S. military ships and aircraft within 12 nautical miles of China’s reclaimed reefs. These freedom of navigation operations would send a general message of U.S. resolve, as well as demonstrate that Washington would not recognize any illegal Chinese claims to additional maritime rights based on the artificial expansion of its occupied features. Previously, the United States had avoided such shows of force out of a fear of unnecessary escalation. Since 1979, the Department of Defense has executed the Freedom of Navigation Program to “demonstrate a non-acquiescence to excessive maritime claims asserted by coastal states.”


chief, Admiral Harry Harris, also called China’s “unprecedented” actions akin to building “a great wall of sand.” Amid these tensions, the Philippine foreign secretary announced that Manila would resume its “repair and maintenance” program in the Spratlys, including renovating Thitu Island’s airstrip.47

On April 9, just hours after the release of new satellite images, Beijing gave its first-ever detailed clarification of its island building in an attempt to dull the reputational impact of its activities. The Ministry of Foreign Affairs listed the “main purposes” for its “maintenance and construction” work in the Spratly Islands as “improving the living and working conditions of personnel stationed there . . . better safeguarding [China’s] territorial sovereignty and maritime rights and interests . . . [and] better performing China’s international responsibility and obligation in maritime search and rescue, disaster prevention and mitigation, marine science and research, meteorological observation, environmental protection, navigation safety, fishery production service and other areas.” Although civilian functions dominated this list, officials also noted that the construction would “satisfy . . . the need of necessary defense.” The foreign ministry highlighted the region’s geographic remoteness, disaster-prone weather, and important sea lanes and fishing grounds as reasons why China must provide more “services to ships of China, neighboring countries, and other countries that sail across the South China Sea.” Furthermore, responding to criticism over the destruction of coral reefs, Beijing guaranteed that its reclamation projects had “gone through scientific assessments and rigorous tests” that took “into full consideration the protection of [the] ecological environment and fishing resources.”48 On April 16, the Chinese ambassador to Washington echoed these arguments and noted that China would now be able to “shoulder greater responsibilities for international stability.”49

This diplomatic effort did little to mollify ASEAN member states. At the April 26 ASEAN Summit in Malaysia, the organization issued a joint statement critical of Beijing’s activities. Although it did not mention China by name, the statement noted that the heads of state “share the serious concerns by some leaders on the land reclamation being undertaken in the South China Sea, which has eroded trust and confidence and may undermine peace, security, and stability.” As host, however, Malaysian prime minister Najib Razak did not talk about the issue publicly. The joint statement also did not contain Hanoi and Manila’s demand for an immediate halt to Chinese reclamation and construction activities.50 Responding to this criticism, the Chinese foreign ministry voiced a litany


48. Independent analysts, however, have pointed out that China has not released environmental impact assessments, which are required by international and Chinese domestic law. Abhijit Singh, “A Looming Environmental Crisis in the South China Sea,” Asia Maritime Transparency Initiative, August 12, 2016; Sui-Lee and Ben Blanchard, “China Mounts Detailed Defense of South China Sea Reclamation,” Reuters, April 9, 2015; Hua Chunying, “Foreign Ministry Spokesperson Hua Chunying’s Regular Press Conference on April 9, 2015” (press conference, Ministry of Foreign Affairs, Beijing, April 9, 2015).


of complaints about reclamation, construction, and militarization efforts by the Philippines, Vietnam, and others on their own outposts in the Spratlys.  

The mutual recriminations escalated in May. On May 20, a CNN crew was invited to join a U.S. Navy P-8A reconnaissance flight near China’s reclamation sites in the Spratly Islands. A PLA Navy dispatcher issued eight warnings for the U.S. aircraft to “leave immediately” and gave notice that the aircraft was “approaching our military alert zone.” Pentagon spokespersons noted that the United States would continue these “nearly daily” reconnaissance flights to demonstrate U.S. commitment to freedom of navigation and overflight in the region.  

On May 29, just before the annual Shangri-La Dialogue, the U.S. Defense Department announced it had observed a pair of mobile artillery pieces on one of China’s reclaimed reefs. Secretary of Defense Ashton Carter reiterated the United States’ demand for “an immediate and lasting halt to land reclamation by all claimants.” Carter also discussed the U.S. proposal for a moratorium with his Vietnamese counterpart, but Hanoi would not agree to a universal halt that bound Vietnam itself. The Vietnamese defense minister maintained that Hanoi’s activities were aimed merely at preventing water erosion. During his own remarks, PLA Deputy Chief of Staff Admiral Sun Jianguo highlighted China’s construction of an oceanic survey station at Fiery Cross and two lighthouses at Johnson South and Quarteron as examples of its benign intentions to provide greater “international public services.” One week after the dialogue, the G7 countries issued a joint declaration affirming that their leaders “strongly oppose . . . any unilateral actions that seek to change the status quo, such as large-scale land reclamation.”  

In mid-June, Beijing tried to lower the diplomatic temperature by announcing the end of some reclamation activities. On June 16, a foreign ministry spokesperson stated that the land reclamation component of China’s operations on “some” of its outposts would “be completed in the upcoming days.” However, a second phase would follow, in which China intended to “start the building of facilities to meet relevant functional requirements.” The U.S. State Department “noted” China’s announcement but countered that “China’s stated plans do not contribute to a reduction in tensions, support the emergence of diplomatic and peaceful solutions, or bolster China’s disputed maritime claims.” On June 30, the Chinese Ministry of Foreign Affairs declared that some reclamation projects had reached completion. Commercial satellite imagery released in early July

indicated that China’s airstrip on Fiery Cross Reef was almost complete and construction on other features had made considerable progress.\textsuperscript{56}

On July 22, Japan issued its own denunciation of Chinese land reclamation in a defense white paper. Later that week Admiral Harris again criticized the pace and scale of China’s activities. In response, China accused the United States of being responsible for “militarizing” the South China Sea through its close-in surveillance operations, strengthened alliances, and frequent exercises in the region.\textsuperscript{57}

Overall, this damage control was moderately successful leading into the annual ASEAN Regional Forum meetings in Malaysia on August 4. Media reports suggested that the foreign ministers would officially call for an immediate halt to land reclamation. However, their joint communiqué went no further than the April ASEAN Summit. The chairman’s statement only urged self-restraint.\textsuperscript{58} In response to Secretary Kerry’s call for halts to reclamation, construction, and coercive actions, Foreign Minister Wang argued, “China has stopped. You want to see who is building? Take a plane and go see who is still building.”\textsuperscript{59} In fact, Chinese land reclamation at Mischief Reef and Subi Reef continued into September and October, respectively, during which time China reclaimed over 100 additional acres of new land at these two features. Imagery released on September 15 revealed that China was also laying the groundwork for an airfield at Mischief Reef, the third after Fiery Cross and Subi Reefs. Other analysis found that the Fiery Cross airstrip was already finished.\textsuperscript{60}

\textit{Phase V: U.S. Naval Patrols Target Chinese Outposts}

U.S. domestic and bureaucratic pressure for a greater demonstration of resolve against China’s activities reached a peak on September 17, 2015. At a Senate Armed Services Committee hearing, the assistant secretary of defense for Asian and Pacific Security Affairs, David Shear, told lawmakers that the department was considering "a range of options, including freedom of navigation exercises" near China’s artificial islands. When pressed by Senator John McCain, Assistant Secretary Shear disclosed that the United States had not sent vessels within 12 nautical miles of Chinese-held features in the Spratly archipelago since 2012. Admiral Harris also stated that the U.S. Navy had not recently conducted any direct “flyover” of those features that were not entitled to any territorial airspace under the UN Convention on the Law of the Sea. In response, China’s foreign


\textsuperscript{58} Lefevre and Leong, “Southeast Asian Nations Back Halt to Land Reclamation in South China Sea”; Association of Southeast Asian Nations, “Joint Communiqué” (press statement, 48th ASEAN Foreign Ministers’ Meeting, Kuala Lumpur, Malaysia, August 4, 2015); Association of Southeast Asian Nations, “Chairman’s Statement” (press statement, 22nd ASEAN Regional Forum, Kuala Lumpur, Malaysia, August 6, 2015).

\textsuperscript{59} Mathew Lee and Eileen Ng, “Tensions Rises in South China Sea,” \textit{Associated Press}, August 5, 2014.

ministry expressed “serious” concern and urged the United States to “refrain from taking any provocative and risky action.”

Later that month, U.S. president Barack Obama and Chinese president Xi Jinping held a summit in Washington. In a joint press conference on September 25, President Obama said he had reiterated the United States’ commitment to “sail, fly, and operate anywhere international law allows,” including in the South China Sea. He also communicated “significant concerns over land reclamation, construction, and the militarization of disputed areas.” For his part, President Xi defended China’s actions and sovereignty while downplaying any threat to international freedom of navigation and overflight. Critically, Xi stated that the “relevant construction activities that China [is] undertaking in the [Spratly] Islands do not target or impact any country, and China does not intend to pursue militarization.” This statement has often been cast as a promise not to take any actions to further militarize the South China Sea, but Xi’s actual words were a statement about intentions, not a promise. Moreover, Xi’s statement was limited to the Spratly Islands, not the South China Sea as a whole, and it left the definition of militarization ambiguous. A Chinese Ministry of Foreign Affairs press conference soon after, for example, suggested that “a limited amount of necessary military facilities for defense purposes only” was consistent with President Xi’s statement.

Despite Xi’s unexpected statement, Pentagon leaks about an impending freedom of navigation operation in the South China Sea started to increase in early October. At this time, Defense Department options had reportedly been given to the president. The White House just had yet to make a final decision. In a meeting between the U.S. and Australian foreign and defense ministers on October 14, the United States reportedly informed its ally of its intentions to conduct patrols in the South China Sea. The two countries issued a joint statement that called on “all claimant states to halt land reclamation, construction, and militarization.” Yet the allies did not hold “concrete talks” on Australia joining U.S. freedom of navigation patrols.

The United States finally undertook its first freedom of navigation patrol near one of China’s man-made islands on October 27. A U.S. Navy guided missile destroyer, the USS Lassen, sailed within 12 nautical miles of what was originally a low-tide elevation at Subi Reef. It was accompanied by a

64. See, for example, Dan de Luce and Paul McLeary, “In South China Sea, a Tougher U.S. Stance,” Foreign Policy, October 2, 2015; David Larter, “Navy Will Challenge Chinese Territorial Claims in South China Sea,” Navy Times, October 8, 2015.
P-8A surveillance aircraft, which did not enter the 12-nautical-mile zone. Although the \textit{Lassen} itself did come within 12 nm, its fire control radars were turned off and it flew no helicopters during the transit. These details surprised many U.S. observers because the destroyer’s behavior seemed designed to conform to the UN Convention on the Law of the Sea’s rules for innocent passage through territorial waters. The confusion was augmented by administration officials’ silence on the operational details in its wake.\textsuperscript{66}

The secretary of defense finally clarified the operation in a letter to Congress two months later, drawing attention to factors not appreciated by observers prior to the patrol. Subi Reef sits within 12 nm of Sandy Cay, which is itself probably entitled to a territorial sea. Under the Law of the Sea, claimants to Sandy Cay enjoy the legal right to “bump out” that feature’s territorial sea using Subi Reef as the new baseline. Therefore, this U.S. freedom of navigation operation was not a challenge to China’s legal entitlement to a territorial sea around Subi Reef. Rather, the United States chose to challenge what it views as China’s excessive maritime claim to demand “prior permission or notification of transits within territorial seas.” During the course of the same mission, the \textit{Lassen} also conducted innocent passage freedom of navigation patrols within 12 nautical miles of North-east Cay, Southwest Cay, South Reef, and Sand Cay, which are occupied by Vietnam or the Philippines. The U.S. Navy did not give prior notification to any of these claimants. One official explained that the Obama administration “wanted to assert our rights under international law, but not to the point where we were poking the Chinese in the eye.”\textsuperscript{67}

Two PLA Navy guided missile destroyers shadowed the USS \textit{Lassen} and issued warnings for it to leave during its patrol near Subi Reef. These were the \textit{Lanzhou} (170), a \textit{Luyang II}–class guided missile destroyer, and the \textit{Taizhou} (138), a \textit{Sovremenny}y II–class guided missile destroyer. Yet the vessels did not attempt to interrupt the \textit{Lassen}’s transit. One U.S. Department of Defense official called it a “professional” encounter. Other Chinese “merchant vessels” in the area “were not as demure,” however, and “one came out of anchorage in the island and crossed the destroyer’s bow but at a safe distance.”\textsuperscript{68}

A Chinese government spokesperson said the PLA Navy vessels had intercepted and hailed the USS \textit{Lassen} “according to law.” He condemned the U.S. patrol as a “coercive action that seeks to militarize the South China Sea region” and an abuse of freedom of navigation. Another spokesperson said the \textit{Lassen} had entered Chinese waters “illegally” in a “deliberate provocation.” Asserting that Beijing would “resolutely respond,” the foreign ministry suggested that this might include efforts to “increase and strengthen the building up of our relevant [defense] abilities” in the region. Chinese vice foreign minister Zhang Yesui also summoned U.S. ambassador Max Baucus to tell him the operation was “extremely irresponsible.” At Beijing’s request, Admiral John Richardson, the

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In January 2016, China landed two civilian aircraft on its now fully operational airfield at Fiery Cross Reef. The same month, the U.S. Navy undertook another freedom of navigation patrol in the disputed Paracel Islands. Commercial satellite imagery revealed weeks later that China had begun installing a high-frequency radar on Cuarteron Reef, where construction was nearly complete. In April, a PLA Air Force aircraft landed on Fiery Cross in the Spratly Islands for the first time, ostensibly to evacuate three sick workers.73

Then in May, the USS William P. Lawrence guided missile destroyer conducted the United States’ second patrol within 12 nautical miles of a Chinese reclaimed reef in the Spratlys, this time at Fiery Cross Reef. China reportedly dispatched three warships and two fighter jets to monitor the U.S. destroyer, which was again challenging China’s requirement that foreign military vessels obtain prior permission before entering its territorial waters. The Chinese foreign ministry expressed “resolute opposition” to this latest U.S. freedom of navigation operation, which allegedly “only further justified China’s construction of defense facilities in the area.”74 Meanwhile, construction activities continued on the seven reclaimed features (see Figures 3.17 to 3.37 below for detailed information on upgrades to all of the seven Chinese-occupied reefs in the Spratly Islands).

Conclusions

First, the scale of land reclamation is what differentiates Chinese activities in the Spratlys from those of other claimants. Nearly all claimants to the Spratly Islands have engaged in land reclamation, including since the signing of the 2002 China-ASEAN Declaration. China’s actions are no more illegal than those of other claimants—except in the case of Mischief Reef, which is wholly within the Philippines’ exclusive economic zone and continental shelf, and in the case of violations of China’s duties to protect the marine environment under the UN Convention on the Law of the Sea. The 2002 Declaration does not explicitly prohibit upgrading previously occupied features. This reality constrains states that feel threatened by China’s massive construction efforts. ASEAN failed to endorse a moratorium not only because of Beijing’s pressure, but also because Vietnam was simultaneously conducting numerous, if less ambitious, improvements to its outposts throughout the Spratlys.

Second, China’s strategy in the South China Sea involves strengthening its claims while opposing the efforts of other states to consolidate their own claims. Although this strategy is less escalatory than occupying new features or using force to expel other claimants, it is still destabilizing because China is a rising power that is already the strongest in the region (after the United States).75 New airstrips, ports, and radar systems in the Spratlys will enable it to exercise control in peacetime as well as wartime to a degree no other claimant can match.

Third, China probably had operational plans for reclamation ready for years, but chose not to execute them until the South China Sea situation began deteriorating. The 2012 Scarborough Shoal standoff, Manila’s initiation of compulsory arbitration, efforts by Vietnam and others to consolidate their own outposts, and negotiations to grant the United States access to Philippine bases all seem to have played a role in Beijing’s more active stance. Chinese actions are consistent with historical research suggesting that Beijing is most likely to escalate territorial disputes when it controls little of what is being contested or believes its claim is weakening.76

Fourth, to date China has not used force to disrupt U.S. freedom of navigation near the Spratly Islands. Chinese forces have not interfered with U.S. Navy patrols within 12 nautical miles of reclaimed features, although the PLA Navy shadowed and hailed the USS Lassen and USS William P. Lawrence during their transits. Beijing could harass U.S. forces operating in the area, similar to the Impeccable and “Top Gun” incidents, but thus far has not chosen to do so.77 However, Chinese maritime capabilities will continue to improve over time, so the U.S. military will likely face increasingly capable platforms during these intercepts. The shifting local military balance will also increase pressure on other claimants and regional states as China stations more law enforcement and military capabilities at its new bases.

75. This conclusion is largely copied from M. Taylor Fravel, “China’s Strategy in the South China Sea,” Contemporary Southeast Asia 33, no. 3 (2011): 299–300.
Finally, neither the other claimants nor the United States were willing to use force to physically interfere with China’s dredging and construction operations. In part, this is because these operations were conducted quickly and it took time before international observers were aware of the scale of the Chinese effort. It is possible that China might have been deterred if various states had taken a stronger line early on. Yet, it is notable that no regional state appears to have seriously considered a military response. This restraint arises partly from diplomatic and legal constraints but also from a lack of capabilities, suggesting that the growing military imbalance between China and its neighbors may play an important, if unseen, role in any future incidents.