

THREAT
ANALYSIS

CHINA

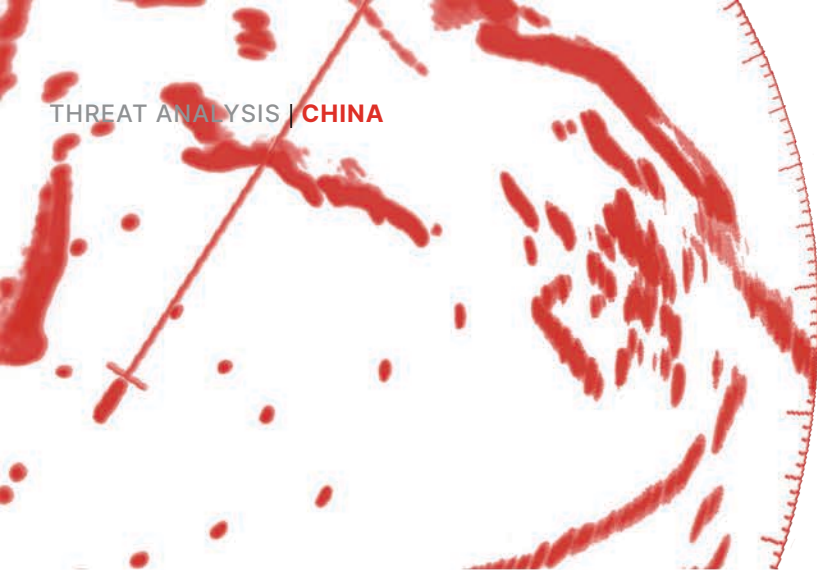
Recorded Future®

By Insikt Group®

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10 YEARS OF SANSHA CITY IN THE SOUTH CHINA SEA: Better Equipped and More Effective



This report analyzes the activity of Sansha City, which is responsible for administering China's claims in the South China Sea, with a focus on activity between mid-2021 and mid-2022. It draws from procurement records, local government bulletins, automatic identification system (AIS) data, satellite imagery, Recorded Future® Platform data, and other open-source information. The report will be of most relevance to governments and militaries with an interest in Southeast Asia and the broader Indo-Pacific region, as well as journalists and analysts following the South China Sea disputes. Information about the report's author, Zoe Haver, can be found at the end of the report.

Executive Summary

The People's Republic of China (PRC) established Sansha City in July 2012 to administer the bulk of its maritime and territorial claims in the South China Sea. After 10 years of development, Sansha is now well-equipped to advance China's maritime and territorial interests on a day-to-day basis at the expense of the PRC's neighbors. This report examines examples of the city's recent activity in the following areas: maritime law enforcement, communications, open-source intelligence, information technology, party-state governance, maritime militia operations, and external partnerships. As a result of the activities documented here, the Chinese party-state's ability to monitor and control contested areas is strengthening and the PRC's scattered outposts are becoming increasingly effective hubs of Chinese activity, helping to transform disputed land and sea space into de facto PRC territory.

Key Judgments

- 10 years of continuous development has equipped Sansha City with the infrastructure, technology, and other assets that it needs to effectively govern contested areas of the South China Sea.
- Sansha uses its maritime law enforcement and maritime militia capabilities to enforce the PRC's maritime and territorial claims without risking military escalation, and is actively improving these capabilities.
- The city is investing in technologies that facilitate information sharing, support vessels' operations across the South China Sea, and streamline day-to-day affairs on occupied features.

- In addition to carrying out local administration, the party-state authorities in Sansha very likely support efforts to legitimize China's claims in international legal and academic fora and monitor the international political, military, and legal trends affecting the South China Sea disputes.
- The city frequently leverages the resources, expertise, and technologies of third-party entities to support its mission, including state-owned enterprises like China Mobile, private companies like Huawei, state-affiliated think tanks like the National Institute of South China Sea Studies, and private think tanks like Grandview Institution.

Background

10 years ago on July 24, 2012, China officially [established](#) Sansha City (三沙市) and granted it jurisdiction over a significant portion of the South China Sea.¹ In total, the city supposedly [administers](#) more than 280 islands, reefs, and other features and their surrounding waters, which add up to around 2 million square kilometers (800,000 square miles) of sea and land. Its headquarters is on Woody Island in the Paracel Islands, and most of its activity has thus far been concentrated in the Paracels.² When the city was created in 2012, the PRC's outposts were sparsely populated and [underdeveloped](#), often struggling with basic necessities like electricity and fresh water, which seriously restricted the scope of activity on PRC-occupied islands and reefs. Since then, Sansha's leaders have worked tirelessly to develop the city, building [infrastructure](#), setting up new [political institutions](#), investing in [transportation](#), mobilizing [companies](#), constructing [housing](#), deploying [maritime surveillance](#) capabilities, and improving [communications](#) in both the Paracel Islands and the Spratly Islands. Sansha's leaders have also created a highly capable [maritime militia force](#) and [worked closely](#) with the [People's Liberation Army](#) (PLA) and China Coast Guard (CCG) to enforce China's claims and project power into maritime Southeast Asia. After 10 years of effort, Sansha City has realized a system of [normalized administrative control](#) that allows the PRC to increasingly govern contested areas as if they were actual Chinese territory.

¹ More specifically, the city has jurisdiction over the Paracel Islands, the Spratly Islands, and the so-called Zhongsha Islands (Macclesfield Bank and Scarborough Shoal), as well as their surrounding waters. For a map of the South China Sea, see Appendix A.

² The city has been active in the Spratly Islands as well, but the military is almost certainly still responsible for the bulk of affairs on China's outposts in this far-flung area.



Figure 1: Satellite image of Woody Island from May 2022 (Source: Powered by Planet: SkySat 50cm. Courtesy of SkyWatch)

Recent Activity

This section analyzes recent³ examples of Sansha City's activities related to maritime law enforcement, communications, open-source intelligence, information technology, party-state governance, maritime militia operations, and external partnerships. In each of these instances, the highlighted activity is just 1 example of the city's broader ongoing efforts in a given area.⁴

³ Activity that occurred between mid-2021 and mid-2022.

⁴ For example, in the Communications section of this report we discuss 1 of the city's recent communications projects, but the city has pursued numerous other communications projects over the past year.

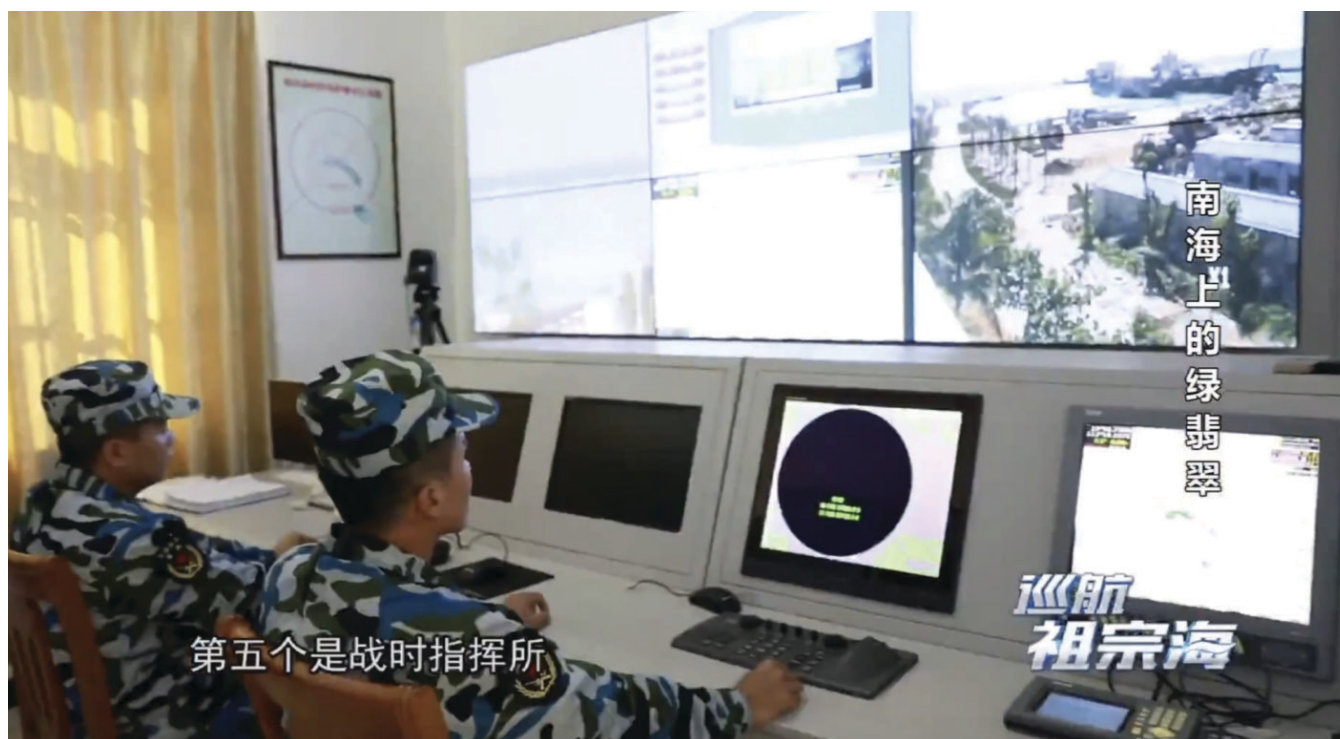


Figure 2: Footage of the maritime militia command post on Tree Island showing radar and video surveillance capabilities (Source: Sansha Satellite TV)

Maritime Law Enforcement

Sansha is improving its maritime law enforcement capabilities, which will allow the city to better enforce China's maritime and territorial claims at the expense of the PRC's neighbors in Southeast Asia.⁵ Maritime law enforcement forces, which can monitor contested areas and chase away foreign vessels, are ideal for pushing China's claims because their use lacks the high risk of escalation associated with military force. For example, in November 2021, the Sansha City Emergency Management and Comprehensive Administrative Law Enforcement Bureau (三沙市应急管理和综合行政执法局) announced the winning bidder⁶ for a 2,580,100 RMB (\$400,000) "emergency command information platform" software upgrade contract.⁷ This bureau and its subordinate force, Sansha Comprehensive Law Enforcement (SCLE; 三沙市综合执法支队), coordinate closely with the city's maritime militia, the PLA, and the CCG on the front lines of the South China Sea disputes. Documents associated with the project specify that the successful bidder was to provide "Sansha sea area ocean and ship management software", a "video fusion access platform", "maritime target monitoring", and other software upgrades. The documents also discuss the operation of the platform, with notable details including:

- Integration of maritime target information from government ships, attack boats, aircraft, island personnel, commercial ships, fishing boats, and "702nd Institute" (702所) floating platforms⁸
- Fusion of radar, AIS, [BeiDou](#), and [optoelectronic](#) target information
- Use of a satellite transmission network to link law enforcement ship optoelectronic tracking systems
- Integration of video surveillance equipment from leading Chinese surveillance providers Hikvision, Dahua, and Uniview
- Use of wired, wireless, 4G, and 5G equipment

⁵ The other claimants in the South China Sea disputes are Vietnam, the Philippines, Malaysia, Taiwan, and Brunei. Indonesia is involved in some of the disputes, but is not a formal claimant.

⁶ The winning bidder is Hainan Xin Wei Lan Information Science and Technology Co., Ltd. (海南新蔚蓝信息科技有限公司).

⁷ Source documents held by Recorded Future.

⁸ Likely referring to platforms developed by the [China State Shipbuilding Corporation 702nd Research Institute](#) (中国船舶集团公司702研究所), which is also known as the China Ship Scientific Research Center (中国船舶科学研究中心). This organization was likely [involved](#) in the development of the floating platform discussed below in the Communications section of this report.

Communications

Sansha continues to develop communications infrastructure across the South China Sea, which helps the city's vessels and personnel effectively operate throughout the city's extensive jurisdiction. This communications infrastructure helps military and civilian entities from the PRC coordinate the defense of China's claims, monitor contested areas, collect scientific data (which often has military [applications](#)), and engage in a wide range of other activities across the South China Sea. For instance, in June 2022, the Sansha City Tourism, Culture, and Transportation Bureau (三沙市旅游文化和交通运输局) selected the Hainan branch of state-owned China Mobile to provide a new "ship-to-shore integrated communications capability" for a floating platform that operates in the Crescent Group of the Paracel Islands.⁹ The platform currently provides scientific testing, ecological protection, and other functions but lacks independent communications, which has forced the platform to rely on signal from Drummond Island and negatively affected its performance. According to the winning bid announcement, the project includes satellite communications equipment worth around 3,494,000 RMB (\$538,000) and involves numerous components from foreign companies.¹⁰ The platform appears to have been positioned near 16°28'12.58"N, 111°44'9.90"E (49 N 578570 1821086; 49Q EU 78569 21086) since around August 2018.



Figure 3: Satellite image from July 2022 showing the likely location of the platform northwest of Drummond Island (Source: Powered by Planet; SkySat 50cm. Courtesy of SkyWatch)

⁹ Source documents held by Recorded Future.

¹⁰ Sansha City has a well-documented [history](#) of acquiring and using [foreign technology](#).

Open-Source Intelligence

Sansha is leveraging third-party open-source intelligence capabilities, which very likely helps the city understand the international political, military, and legal trends that influence the South China Sea disputes. The local authorities almost certainly seek to monitor these factors on an ongoing basis because a core component of the city's [mission](#) is to advance China's maritime and territorial claims without destabilizing the security situation in the South China Sea. For example, in June 2021, the Chinese Communist Party (CCP)'s Sansha City Committee Propaganda Department (中共三沙市委宣传部) announced the winning bidder for an "international issues trend information monitoring and analysis project".¹¹ The winning bidder is Beijing Guoguan Tianxia Consulting Co., Ltd. (北京国观天下咨询有限公司), which is a subsidiary of [Grandview Institution](#) (国观智库), a Beijing-based think tank. The contract involved 599,100 RMB (\$92,000) in fees, including a "global public opinion monitoring system" usage fee, a "multidimensional smart information acquisition system" usage fee, a database usage fee, a fee for media reports and newspaper subscriptions, a fee for the translation of English and other foreign-language information, and an expert consulting fee, among others. Beijing Guoguan Tianxia Consulting Co., Ltd. also signed a similar "international South China Sea issues trend information monitoring and analysis" contract with Sansha City's propaganda department in June 2020.

¹¹ Source documents held by Recorded Future.

序号	名称	服务内容	数量	单价	总价 (元)
1	全球舆情监控分析系统使用费	使用全球舆情监控分析系统监控重点媒体舆情。	1	40,000	40,000
2	多维度智能信息抓取系统使用	使用多维度智能信息抓取系统收集项目有关信息。	1	50,000	50,000
3	数据资源占用费	项目有关数据占用数据库产生的费用。	1	8,000	8,000

Figure 4: Part of the price sheet from the 2021 international issues dynamic information monitoring and analysis project (Source: CCP Sansha City Committee Propaganda Department)

Information Technology

Sansha is investing in information technology infrastructure on its islands and reefs, which aids the city in streamlining operations and improving the standard of living on occupied features. The rollout of this technology on PRC-occupied islands and reefs makes these outposts more effective and self-sufficient hubs that China can use to project control along the front lines of the South China Sea disputes. For instance, according to a city government bulletin,¹² Huawei led a 5-day big data engineer certification training on Woody Island in June 2021.¹³ The training involved lessons from Huawei Global Training Center instructors on subjects like big data development trends and Huawei big data solutions. The activities ultimately provided “comprehensive systematic training” for “the whole city’s computer network technicians”. The training was oriented toward “solving problems encountered during actual work”. A “relevant person in charge” stated that the training was intended to popularize foundational big data knowledge in the city, improve the comprehensive quality of information technology technicians, and contribute to Sansha City’s “smart city” (智慧城市) construction. This training appears to have been a [Huawei Certified ICT Associate](#) (HCIA) training. Huawei also led a similar 5-day “HCIA cloud computing engineer certification training course” on Woody Island in April 2021. These training activities likely occurred as part of a new

strategic cooperation agreement between Huawei and Sansha City. When the city and Huawei signed the agreement in April 2021, a city official stated that Sansha City was aiming to promote an “intelligent, low-carbon, ecological, and livable” model for its islands and reefs, and that its cooperation with Huawei would help realize this goal.

¹² Source documents held by Recorded Future.

¹³ In addition to such trainings, Huawei previously has [partnered](#) with the PLA’s Xisha Maritime Garrison Command (西沙水警区), the Sansha City government, and other relevant entities to develop smart grid infrastructure on Woody Island. It has also [provided](#) 5G equipment for use on Woody Island.



Figure 5: Footage of Huawei's cloud computing engineering training course on Woody Island in April 2021 (Source: Sansha Satellite TV)

Party-State Governance

The party-state authorities in Sansha are expanding their capacity to directly govern disputed areas via regulations and other administrative means. Such activity expands PRC political institutions into the South China Sea, helping to transform contested areas into de facto Chinese territory, which excludes other claimants from effectively doing the same. For example, in October 2021, the city released “Sansha City Islands and Reefs Fishing Boat Safety Provisional Measures” (三沙市岛礁渔业船舶安全暂行办法).¹⁴ The “general provisions” section of the document specifies that the provisional measures are intended to strengthen and regulate Sansha City’s fishing boat safety management work, maintain fishing safe production order, and promote the healthy development of the fishing industry. It also states that the provisional measures are “applicable” to the fishing boat safety management work of each island-reef community in the Paracel Islands. The “division of responsibilities” section explains that the Sansha City Oceans and Fisheries Bureau (三沙市海洋和渔业局) is responsible for the overall planning of the city’s fishing boat safety work, that the city’s management committees¹⁵ have relevant responsibilities, and that numerous maritime law enforcement agencies and forces are involved in the implementation of the provisional measures.

¹⁴ Source documents held by Recorded Future.

¹⁵ Management committees (管理委员会) are local state [institutions](#) that directly administer specific groups of occupied islands and reefs.

三沙市岛礁渔业船舶安全管理暂行办法

第一章 总则

第一条 为了加强和规范我市岛礁渔业船舶安全管理工作，维护渔业安全生产秩序，促进渔业健康发展，根据《中华人民共和国渔业法》《中华人民共和国安全生产法》等法律法规，结合三沙市实际，制定本办法。

第二条 本办法适用于我市西沙群岛各岛礁社区的渔业船舶安全管理工作，包括悬挂三沙船舶治安标识牌和正式号牌的渔业船舶。

第三条 在市委、市政府的统一领导下，坚持安全第一、预防为主、统一指挥、属地管理、行业监管、分级负责和群众参与，全力做好岛礁渔业船舶安全管理工作，确保岛礁渔民群众生命财产安全。

Figure 6: “General provisions” section of “Sansha City Islands and Reefs Fishing Boat Safety Provisional Measures” (Source: Sansha City People’s Government Net)

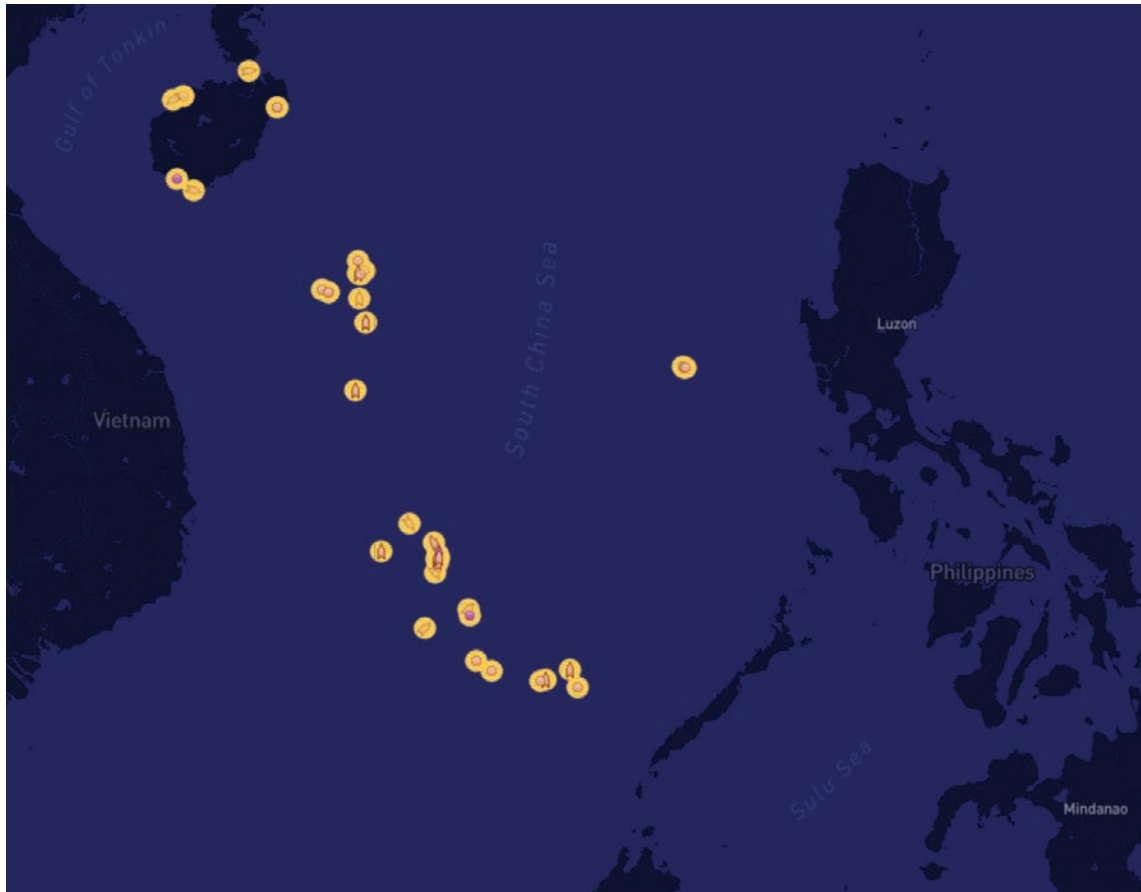


Figure 7: Sansha City maritime militia vessel positions as of July 15, 2022 (Source: MarineTraffic)

Maritime Militia Operations

Sansha's maritime militia forces maintain a continuous presence throughout the South China Sea, allowing them to monitor disputed areas, physically assert China's claims, and support PLA and CCG operations. Like its maritime law enforcement forces, China's maritime militia forces allow the PRC to directly challenge competing claimants and force them out of disputed waters while largely avoiding the risk of military escalation. China's maritime militia forces also have the added benefit of deniability, as the PRC authorities often try to [claim](#) that its maritime militia forces are ordinary fishermen. For instance, according to July 15, 2022, AIS data from MarineTraffic, there were at least 31 vessels from the Qiongsanshayu (琼三沙渔) fleet¹⁶ actively operating in the South China Sea, with others located at harbors on the Hainan mainland. These vessels were operating near the Crescent Group of the Paracel Islands, Subi Reef in the Spratly Islands, Mischief Reef in the Spratly Islands, and Scarborough Shoal, among other areas. When deployed in the South China Sea, these vessels [reportedly](#) surveil foreign vessels and [sometimes](#) chase away or even board them.

¹⁶ Each of the new steel-hulled vessels in the city's maritime militia fleet usually [operates](#) under the name of "Qiongsanshayu" followed by several numbers, such as "Qiongsanshayu 00310".

External Partnerships

Sansha is partnering with Chinese research organizations that are responsible for [promoting](#) China's maritime and territorial interests in international legal and academic fora. Such efforts are a critical component of the PRC's push to justify its blatantly expansionist behavior in the South China Sea and deflect foreign criticism. For example, in May 2022, the city [signed](#) a strategic cooperation framework agreement with the [National Institute of South China Sea Studies](#) (NISCSS; 中国南海研究院), a state-affiliated think tank that focuses on the South China Sea disputes and carries out research on geopolitics, strategy, international law, and other areas. According to a bulletin from the city government,¹⁷ the city has cooperated closely with NISCSS for years. The new strategic cooperation framework agreement, according to the bulletin, is intended to deepen cooperation on issue research, historical records collection and management,¹⁸ personnel exchanges and training, maritime knowledge popularization, and maritime rights and interests propaganda with the aim of serving the "national [South China Sea] strategy" and fulfilling the "important mission" entrusted by the CCP Central Committee. This "important mission" refers to Sansha City's [responsibility](#) to carry out "rights protection,"¹⁹ stability maintenance, environmental protection, and resource development" (维权、维稳、保护、开发) in the South China Sea.



Figure 8: Sansha City and NISCSS leaders signing their strategic cooperation framework agreement in May 2022 (Source: NISCSS)

Outlook

Over the past 10 years, Sansha City has transformed China's settlements in the Paracel Islands into increasingly self-sufficient and effective outposts, irreversibly advancing China's position in the South China Sea disputes. A recent series of local government bulletins celebrating Sansha City's 10th anniversary highlighted a number of these changes.²⁰ According to the bulletins, the quality of life for soldiers and civilians stationed on these outposts has increased significantly, with leisure, medical care, education, and other amenities having been made widely available; occupied features are now bristling with new harbors, solar panels, seawater desalination facilities, housing, communications equipment, and other such infrastructure; and many of the city's fishermen have transitioned away from traditional fishing to roles like guarding claimed features and protecting the local environment. While Sansha City is somewhat active in the Spratly Islands, it is unclear whether the central authorities will allow Sansha City to carry out similar civilian-oriented development on the PRC's militarized artificial islands in the Spratly Islands, as any activity in this part of the South China Sea risks inflaming tensions and generating regional pushback. Any expansion of Sansha City's role in the Spratly Islands would therefore be a major development, and foreign observers should monitor the city's activity for signs of such expansion.

¹⁷ Source documents held by Recorded Future.

¹⁸ The PRC has attempted to leverage purported [historical and archaeological](#) evidence to bolster the legal validity of its claims.

¹⁹ "Rights protection" means the defense of China's maritime claims in the South China Sea, which are referred to as the PRC's "maritime rights and interests" (海洋权益). These claims [involve](#) sovereign territorial seas and internal waters, exclusive economic zone (EEZ) and continental shelf rights, historic rights, and the regulation of military activities.

²⁰ Source documents held by Recorded Future.

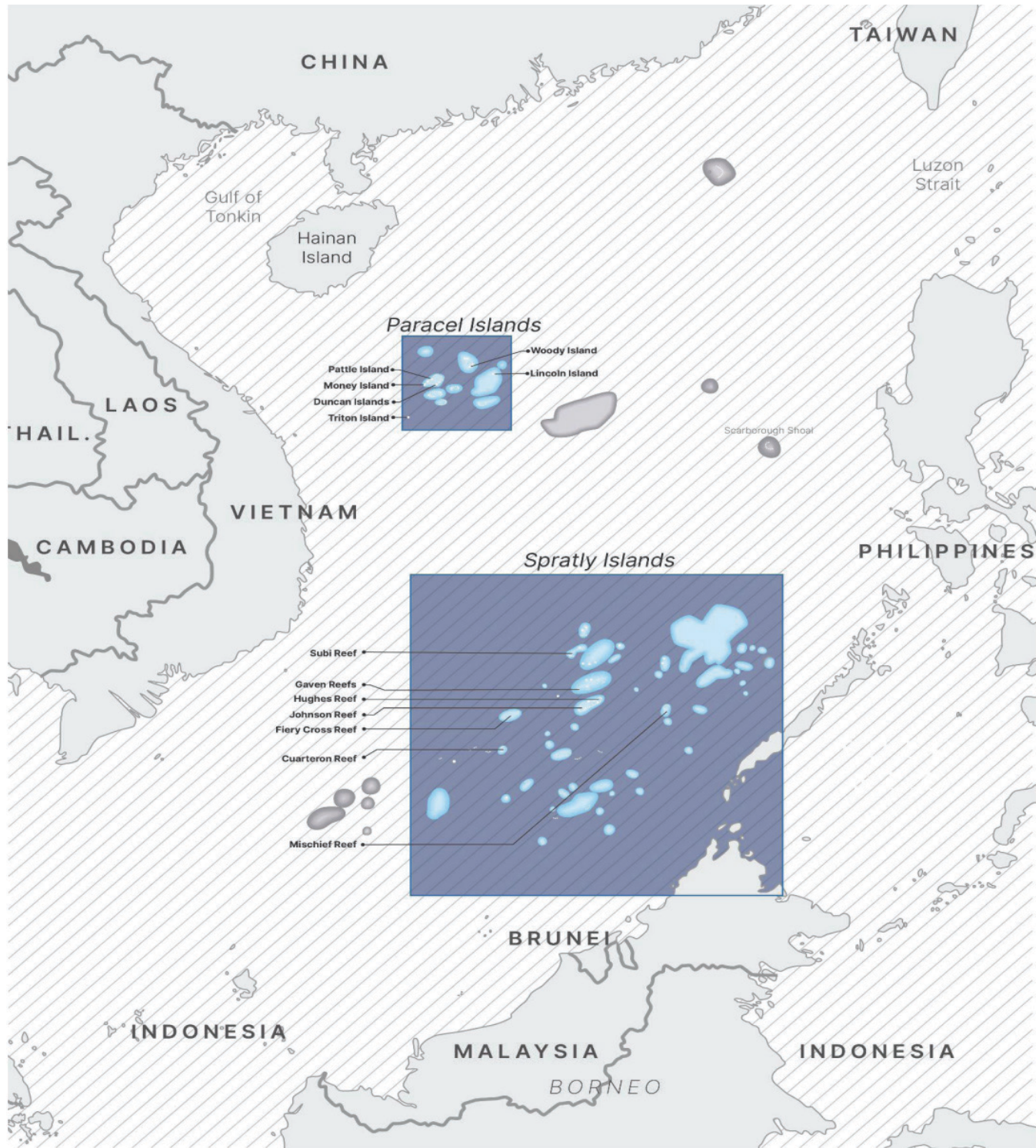
Appendix A: Map of the South China Sea Region

Figure 9: A map of the South China Sea region highlighting notable Chinese outposts in the Paracel and Spratly Islands (Source: Recorded Future)

About the Author

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Zoe Haver is part of Recorded Future's Global Issues team. Her research focuses on the South China Sea disputes, maritime security, the People's Liberation Army, and other China-related security issues. She has worked on these topics for Radio Free Asia, the Center for Advanced China Research, SOSi's Center for Intelligence Research and Analysis, the US Naval War College China Maritime Studies Institute, C4ADS, and other organizations. She received her BA from George Washington University and is proficient in Mandarin Chinese.

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