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Recent Chinese Spy Cases in Taiwan: Knowns, Unknowns, and Implications

By: Russell Hsiao

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In late August, the Taiwan High Prosecutors Office (臺灣高等檢察署) handed down an extraordinary set of sentences involving a 10-person spy ring working for the People's Republic of China (PRC) on the island democracy. An extensive investigation, led by an assortment of national security agencies within Taiwan, reportedly began in mid-2023 and focused on looking into the new—but aggressive—spy ring that ensnared seven active-duty and three retired military personnel. The readout of the cases included charges related to the transfer of classified intelligence about key military sites, and training and troop deployments. In addition to the sensitive intelligence, the cases further involved a sensational conspiracy to have a special forces wing commander pilot defect by flying a CH-47 Chinook onto a Chinese aircraft carrier, as well as the creation of propaganda videos by active service junior military personnel stating that they would surrender to the People's Liberation Army (PLA) in the event of a war. The following analyses provide the background, key features, and implications of these recent cases based on publicly available information.

Background

The 10-person espionage ring was headed by retired Taiwan Army servicemember-*cum*-businessman, Chen Yu-hsin (陳裕炘)—who remains a wanted fugitive by the authorities in Taiwan. Taiwanese investigators believe that Chen was recruited by Chinese intelligence sometime in 2021. After retiring from the military, Chen became a businessman and began to work in China, where he was believed to have been recruited by the Chinese government to spy on Taiwan. Chen then recruited Army Major Hsiao Hsiang-yun (蕭翔云), who had just retired from the military in April 2023 and served in the Republic of

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China (ROC) Army's Chemical, Biological, Radiological and Nuclear (CBRN) Training Center (陸軍化生放核訓練中心).

Hsiao served as one of two key middlemen for Chen in recruiting active-duty army personnel. Based on public reporting, investigators believe that Hsiao had joined Chen's spy ring around August/September 2021, and then helped to recruit his comrades in the Republic of China Army (ROCA). These recruits included Hsieh Ping-cheng (謝秉成)—the other major co-conspirator in the spy ring—and other active-duty military officers, such as intelligence officer Kang Yi-pin (康奕彬) and Major Ho Hsin-ju (何信儒). From the end of 2022 to March 2023, Hsieh then successfully recruited several active-duty military personnel: Lieutenant Colonel Hsieh Meng-shu (謝孟書), Captain Hung Jui-yang (洪睿洋), and Lu Chun-fang (陸駿方) to join Chen's spy ring. In totality, Chen, Hsiao, and Hsieh successfully recruited seven active-duty junior officers.

While the officers that Chen's cabal had recruited were junior in rank, they were posted at important military sites for the ROCA. They were tasked by Chen and his lieutenants to spy on secrets such as the *Han Kuang* Military Exercise (漢光演習) and the top-secret *Gu-An* Combat Plan (固安作戰計畫), and other classified military plans and internal assessments.

In addition to passing classified military information to the enemy, the recruitment of Lieutenant Colonel Hsieh Meng-shu exposed a dormant but renewed threat in Chinese intelligence operations against Taiwan: defection.

When he was approached by Hsieh Ping-chang, Lieutenant Colonel Hsieh was serving in the 601st Brigade of the Army Aviation and Special Force Command (陸軍航特部601旅). To entice Hsieh to join the spy ring, Chen invited Hsieh Meng-shu to travel to Thailand (a frequent location used by Chinese intelligence) and promised to assist Hsieh's wife and children in fleeing Taiwan and obtaining Thai visas if and when war broke out. Most interestingly, Chen's handlers were two Chinese persons reportedly with PLA affiliations: one was identified as a PLA general referred to as "General Wang," and another a commander of the Guangzhou Military Region (廣州軍區) who went by the name of "General Wu." They provided Hsieh with a mobile phone equipped with an encrypted cryptocurrency program and an accompanying account code. As part of the original proposed deal, in addition to passing along classified information, Hsieh would fly a CH-47 Chinook helicopter onto a Chinese aircraft carrier. The Chinese intelligence agents promised to pay Hsieh NTD $200,000 (USD $6,250) per month.

After assessing the risks, Hsieh Meng-shu allegedly declined the initial offer, but agreed after the offer was raised to USD $15 million. In June/July 2023, Hsieh Ping-cheng, Chen Yu-hsin, Hsieh Meng-shu, held a video conference with "General Wang" and "General Wu" and conspired to have Hsieh Meng-shu fly the military helicopter to the aircraft carrier during an exercise off the coast of Kaohsiung. The plan was intercepted and foiled by Taiwan's Ministry of National Defense (MND, 國防部) and foiled by counterintelligence units before the plan was realized.

The cabal's exploits did not stop with encouraging Hsieh's defection. Junior officers enlisted by Chen, Hsiao, and Hsieh—presumably at the instructions of Chen's handlers—also filmed videos to ostensibly encourage desertion by fellow Taiwanese soldiers. The video not only detailed the soldiers' service units and professional titles but also had enlisted active duty soldiers stating how they were "willing to surrender to the People's Liberation Army."

Other junior members in the spy ring were focused on collecting military intelligence at posts. Sergeant Liu li-chi (劉立齊) stole military secrets that he should not have had the clearance to access. One of the other recruits, Ho Hsin-ju, had reportedly used his mobile phone to copy the "0221 Project" (0221專案), which is related to secret military deployment, communication links, and mobilization plans. These officers would send the classified intelligence via encrypted messaging app Telegram to Chen, the spy ring leader, who then passed it on to the Chinese agents. Hsieh Ping-cheng would also make an appointment with the junior officers involved in the case to drop the stolen intelligence at a locker in the Taipei Railway Station, and Hsiao would then pick up the payload.

Money appeared to be the primary inducement in this case for the successful recruitment in collecting military intelligence for the Chinese Communist Party

Rank	English	Chinese	Title	Activity	Sentence
	Chen Yu-hsin (Ringleader)	陳裕炘	Businessman	Forming spy ring	At-large
Major	Hsiao Hsiang-yun	蕭翔云	Army's Chemical, Biological, Radiological and Nuclear Training Center [discharged April 14, 2023]	Forming spy ring; stealing classified information	13 years
	Hsieh Ping-cheng	謝秉成	Businessman	Forming spy ring	8 years
Lieutenant Colonel	Hsieh Meng-shu	謝孟書	601st Brigade of the Army Aviation and Special Force Command	Conspired to defect and steal [CH-47] Chinook helicopter; stealing classified information	9 years
Intelligence Officer	Kang Yi-pin	康奕彬	Kinmen Garrison Command	stealing classified information	7 years 2 months
Major	Ho Hsin-ju	何信儒	Huadong Defense Command	stealing classified information	7 years 4 months
Captain	Hung Jui-yang	洪睿洋	Army Infantry 104th Brigade	stealing classified information	7 years
Officer	Lu Chun-fang	陸駿方	Army Infantry 104th Brigade (discharged September 23, 2023)	Filming surrender video	5 years 6 months
Sergeant	Liu Li-chi	劉立齊	Tainan City Reserve Brigade	Filming surrender video; stealing classified information	1 year 6 months
Officer	Wu Chih-peng	吳志鵬	Tainan City Reserve Brigade	Filming surrender video	Innocent

Table created by author. (Table sources: Taipei Times, Ctwant, Tai Sounds, Liberty Times, UDN, *and* UDN.*)*

(CCP, 中國共產黨). According to Taiwan investigators, Hsiao received NTD $620,000 (USD $19,396) from Chinese agents, while Kang received NTD $700,000 (USD $21,799) and Ho NTD $600,000 (USD $18,686) for collecting and passing classified military materials. Hsieh Meng-shu collected a total of NTD $556,000 (USD $17,316) and 40,000 Thai baht in payments, Hong Jui-yang received a payment of NTD $446,000 (USD $13,890), and Lu chun-fang received a bribe of NTD $10,000 (USD $311). The price for each delivered item of military intelligence was reportedly NTD $100,000 (USD $3,114).

The investigation into the spy ring was purportedly launched at the end of May or July 2023—two years after Chen was believed to have been recruited as a Chinese spy. The breakthrough for the case likely began with Hsieh Ping-cheng. After his discharge from the military, Hsieh set up a male escort business in the central city of Taichung to recruit military personnel who presumably needed the money. Hsieh brazenly even called the front the PLA's Taiwan Garrison command center and would refer to himself as a senior colonel in the PLA Guangdong Southern Theater Command Taiwan Branch. In August 2023, the warrant for Hsieh Ping-cheng was approved and expanded after investigators unraveled suspicious financial transactions between Lieutenant Colonel Hsieh Meng-shu and Hsieh Ping-cheng that led to an indictment issued in November 2023.

Key Features

Younger, Motivated by Money, and Army-Centered

An interesting feature that can be observed in this group of convicted spies is that they were all from the ROCA and involved relatively younger military personnel than have been typically present in prior major cases, which have often targeted older retirees from the military for espionage recruitment. The motivations of these recruited agents also stand in contrast with the older servicemembers implicated in espionage cases,

in which the recruited agents were more driven by a mix of ideology reinforced by financial gains or other compromising enticements. In contrast, the primary inducement or motivation of these recent cases appears to be money. Moreover, while strong identification with a greater-Chinese identity would often play a role in enticing older military personnel to support the CCP, younger generations of soldiers have less of a natural affinity with the PRC in terms of identity, which would make it presumably harder for Chinese intelligence to recruit them. However, this case, along with some other recent cases, shows that even though there is a stronger sense of Taiwanese identity as a society overall, this is not a bulletproof vest against intelligence recruitment, and financial inducements are still powerful motivators for engaging in espionage. [1]

PLA Political Work

Another important feature of this case that warrants closer scrutiny, but is outside the scope of this preliminary analysis, stems from an organizational perspective of Chinese intelligence agencies and how the ringleader Chen's handlers were ostensibly senior PLA personnel. This would seem to indicate that despite the fallout of the military purges under CCP General Secretary Xi Jinping (習近平), the political work/intelligence apparatuses within the Chinese military remain an active component of its intelligence operations. This type of work would be within the ambit of the Political Work Department under the Central Military Commission (中央軍委會政治工作部) (which would have been the General Political Department of the PLA before the major reorganization in 2015), or the Intelligence Bureau of the Joint Staff Department of the Central Military Commission (中央情報局聯合參謀部情報局). These cases serve as reminders that PRC intelligence activities are not just about stealing secrets but are also aimed at reinforcing psychological operations–such as the case involving active-duty Taiwan military personnel filming a surrender video, and in another case encouraging defection.

Recruitment Means: Online Recruitment and Cryptocurrencies

In terms of methods, these cases also reveal a mix of both traditional and new mediums of recruitment. As revealed by this case, Chinese intelligence agents are also using third-country locations for recruitment, as well as online mediums, encrypted messaging applications such as Telegram, and even cryptocurrencies as a method of payment.

Trendlines and Implications

Indeed, the number of spy cases uncovered by the Taiwan military's counterintelligence units has increased significantly in recent years. For example, a government assessment revealed that from 2011 to 2023, 40 spy cases had been uncovered by the Taiwanese authorities involving 113 military and civilian personnel. This period marked a significant increase from 2001 to 2009, in which *only* 13 spy cases had been uncovered, involving nine military and civilian personnel (including retired personnel). Since the COVID-19 pandemic, the Chinese Communist Party's intelligence units have also begun using different tactics to recruit military personnel with a significant uptick in the use of online mediums through the Internet, with the number of such incidents reaching a staggering 1,706 in little over two years.

An even more notable change is that in recent years the CCP has adapted its infiltration methods in Taiwan to target people not solely based on their military rank, and not simply requiring traditional espionage or spy ring development. Instead, they include a promise by the recruits of "lying low and not resisting in wartime"—or fostering a fifth column—in exchange for financial rewards, which is different from previous infiltration methods.

Chinese intelligence operatives are also using the Internet to access popular online communities and gaming platforms to make contact and lure soldiers. Chinese operatives are posting loans to attract soldiers who need money, expanding its intelligence-gathering techniques. Chinese intelligence operations even use virtual currency as a payment tool, making it more difficult for counterintelligence officials to spot and verify. Indeed, the challenges currently faced by Taiwan's counterintelligence efforts are formidable.

Conclusion: Intensifying Chinese Intelligence, National Counterintelligence Center, and International Cooperation

The Chen Yu-hsin spy ring is one link in a long string of

cases uncovered in recent years that underscore the intensification of PRC intelligence operations directed at Taiwan and the international community. The National Security Bureau (NSB, 國家安全局)—Taiwan's premier intelligence agency—revealed that government agencies have had to investigate 84 national security cases since 2023. These numbers reflect the growing trend of suspected espionage cases that spiked in 2018 amid growing tension in the Taiwan Strait—when Taipei revealed that it had uncovered 52 Chinese espionage cases. According to one 2017 account, Taiwan's national security authorities estimate that about 5,000 individuals are collecting intelligence in Taiwan on behalf of the Chinese government.

While the Taiwan military is a prime target for Chinese intelligence, it has also been traditionally more resourced and better organized to deal with the threat in comparison to other government departments. According to one account, "[a]lthough 80 percent of all detected incidents of Chinese espionage targeted the military, leaving just 20 percent aimed at the civilian government, the disparity was likely due to the military's higher detection rate, as it has counterintelligence capabilities that are absent from the government's administrative offices."

However, a recent Taiwan government assessment found that even though the overall number of personnel in the military has increased year-over-year, the military suffers from a severe shortage of personnel engaged in counterintelligence. For instance, the Political Warfare Bureau Headquarters (政戰局本部), various military headquarters, corps, command, joint brigades, and military security corps have not only failed to reach their personnel quota, but the overall number of staff has been on the decline—underscoring ongoing issues in terms of professional development and retention of expertise. The government assessment also identified serious issues in regard to internal reporting mechanisms and processes that could disincentivize reporting of suspicious activities.

In the final analysis, given the relatively low ranks of the junior officers involved in the spy ring, the value of the intelligence passed to the other side is at least questionable given the publicly disclosed information. The sentences handed down by the court are notable in that they are clearly more severe than in more recent prior cases—this could be intended to send a deterrent signal for would-be spies.

Still, the increase in the number of detected Chinese intelligence activities should be considered in its totality. On one hand, it may be an indicator that Taiwan's counterintelligence capabilities are improving. On the other hand, it should serve as a serious cause for concern for national security officials that Chinese intelligence operations are clearly growing both in scope and scale.

Counterintelligence efforts within Taiwan are currently spread throughout a sprawling array of military and civilian agencies, often with overlapping jurisdiction and authorities. This patchwork approach to counterintelligence can lead to inefficiencies in using Taiwan's finite resources, both in terms of human and financial capital. In addition to an urgent need to increase investments into strengthening its counterintelligence efforts, Taiwan should consider establishing a centralized authority in the form of a National Counterintelligence and Security Center (NCSC), such as the one that exists in the United States housed under the Office of the Director of National Intelligence. The NCSC produces both public and classified assessments to help inform government agencies and the public about counterintelligence matters. Such a center would also help pool resources and information across the counterintelligence enterprise within Taiwan, which is currently under-resourced, understaffed, and residing among several agencies.

In addition to its domestic and cross-Strait implications, these recent cases also underscore the importance of third-country parties in Taiwan's counterintelligence efforts—both in terms of the physical space and in the virtual domain. Given Taiwan's limited international space, however, it is more challenging for Taiwan to get the assistance it needs from other countries. Thailand remains a key location for Chinese intelligence agents to conduct recruitment. Just as Chinese actors could and would operate outside of the PRC to conduct information operations, they can conduct online intelligence recruitment campaigns on foreign soil as well. While the tough sentences handed down by the Taiwan High Prosecutors Office on the Chen Yu-hsin

spy ring represent a step in the right direction, it is incumbent on Taiwan's government to provide sufficient financial support and undertake reforms to its counterintelligence enterprise to demonstrate its seriousness in facing down an increasingly fierce cross-Strait espionage war.

The main point: The recent Chen Yu-hsin spy ring is one link in a long string of cases uncovered in recent years that underscore the intensification of PRC intelligence operations directed at Taiwan. However, some key features of this case—namely, that those involved were younger, motivated by money, and that recruitment is now being done in third-party countries and online—represent important areas of concern for Taiwan's counterintelligence efforts.

[1] In a separate, but related case to the Chen spy ring, a former marine sergeant, Chen Yimin (陳毅閔), was alleged to have leaked classified information to Chinese intelligence personnel between 2022 and 2023 for payments worth NTD $170,000 (USD $5,293). Sergeant Chen was reportedly recruited by Chinese intelligence by way of a loan advertisement that was posted on the Internet. The Chinese agent identified as "Mr. Zhang" posed as a business manager of the loan company and lured Chen to collect and transfer military secrets using communication software like Line and Telegram for payments of NTD $40,000 for each piece of information. The sergeant claimed that he did not know that "Mr. Zhang" was Chinese and an intelligence officer.

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Deterrence through a Taiwan Defense Contact Group

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The Russia-Ukraine War has vastly accelerated cooperation between the revisionist powers of Russia, North Korea, Iran, and the People's Republic of China (PRC). North Korea has provided Russia millions of artillery shells and several dozen ballistic missiles for use against Ukraine; in return, Russia has provided food, economic aid, parts for weapons manufacturing, and advanced technology for North Korean spy satellites. Iran has given Russia thousands of Shahed-131/136 loitering munitions, an unknown number of the Mohajer-6 multi-role unmanned aerial vehicles, and even helped Russia establish its own factory to make more sophisticated Shahed clones. In return, Iran is seeking to acquire Russian attack helicopters, Su-35 fighters, and the S-400 air defense system.

Underpinning the economics of this vast effort is the PRC. The PRC purchased USD $60 billion worth of Russian oil in 2023, with PRC shipping and insurance companies covering for the withdrawal of Western companies following the 2022 invasion. (The PRC has done the same with Iran, as well: Iran has used a global "dark fleet" to clandestinely sell 90 percent of its total oil exports to PRC refineries.) Russia has used its petrochemical windfall to ramp up purchases of Chinese dual-use items. Overall trade surged 23 percent to USD $240 billion from 2022 to 2023, with sharp spikes of PRC sales in dual-use items such as electronics, heavy trucks, excavators, as well as military optics, nitrocellulose for ammunition, and machine tools.

While this cooperation does not rise to the level of a formal military alliance between these states, it does demonstrate how autocracies can leverage their control over levers of power to provide rapid mutual support. Taiwan and its partners must consider the very real risk that the PRC will similarly leverage this support group in any aggressive action in the Pacific. Unfortunately, the current day Indo-Pacific security architecture is not well-suited to provide similarly rapid multilateral support. The PRC's pressure campaign against multilateralism in the Pacific and the region's history means that a NATO-like military alliance is not a realistic option to deter PRC coercion against Taiwan. Instead, many countries have opted for "minilateralism": smaller, flexible groupings to collaborate on relatively narrow areas of shared interest. Examples of this include the Quad and AUKUS, which build long-term defense and institutional capabilities between member states—but are not optimized to provide rapid support during a contingency, or even day-to-day gray zone coercion.

To remedy this, Taiwan and her partners should consider another mode of multilateral cooperation, modeled on the Ukraine Defense Contact Group.

The Limits of Minilateralism for Taiwan

The Quad and AUKUS provide good examples of the

strengths and limitations of the minilateral model. The Quad was founded in the aftermath of the 2004 Indian Ocean Tsunami to coordinate and provide disaster relief aid from the United States, Japan, India, and Australia—but foundered shortly afterwards amidst Chinese pressure and reticence by the member states to transition the discussion from humanitarian assistance and disaster relief to security challenges. In 2017, it was revived following the PRC's escalating campaign of maritime coercion, with a new conceptual basis from Japanese Prime Minister Shinzo Abe's idea of a "democratic security diamond." The Quad now meets regularly, under the banner of delivering "tangible benefits" to the Indo-Pacific—as the member-states strive for a "region that is free, open, inclusive, healthy, anchored by democratic values, and unconstrained by coercion."

However, the revived Quad discussions on security center on long-term capacity building efforts: maritime surveillance capability, freedom of navigation, cybersecurity, and supply chain safety. The July meeting of the Quad Foreign Ministers in Tokyo covered everything from the UN Convention on the Law of the Sea (UNCLOS), militarization of the South China Sea, North Korea, Myanmar, the Middle East, to the Pacific Islands—but not a single mention of Taiwan.

AUKUS, while more narrowly focused on military cooperation, is also a long-term capacity-building project. This grouping aims to strengthen the collective defense capabilities of Australia, the United Kingdom, and the United States. Pillar 1 of AUKUS focuses on Australia's acquisition of 3 Virginia-class, conventionally-armed, nuclear-powered submarines in the 2030s, to be followed by the design and fielding of a future "SSN-AUKUS" in the 2040s. Pillar 2 centers on collaboration in developing advanced military capabilities in AI, quantum technologies, cyber security, hypersonic capabilities, electronic warfare, and information sharing. The connective tissue between these two pillars is the shared commitment to improving the trilateral defense industrial base through defense trade integration.

This provides the three countries a more credible counter against the sheer scale of the PRC military-industrial complex. Like the revived Quad, though, the provided security effects for Taiwan are secondary and long-term. Minilateral institutions serve a vital role in bringing together a more cohesive security architecture in the Indo-Pacific, but are not suited for handling a fast-moving crisis. Instead, an organized multilateral grouping focused solely on the defense of Taiwan is needed.

The Ukraine Defense Contact Group Model…

The aftermath of Russia's shocking invasion of Ukraine in February 2022 revealed serious deficiencies in the West's ability to support a democratic power against aggression. Despite intelligence that warned of Russian invasion plans months in advance, European and

Image: North Korean missiles being used against Ukraine, January 2024. Autocratic military cooperation focuses on rapidly providing capabilities, with no restraints on usage. Western cooperation, particularly in the Indo-Pacific, focuses on long-term capacity-building – and tends to studiously avoid the mention of Taiwan. (Image source: US Defense Intelligence Agency)

even Ukrainian leaders either did not believe the warnings, or else were hesitant to act. Several weeks before the invasion, Germany infamously offered Ukraine a donation of 5,000 helmets. The United States, despite providing several billion dollars' worth of aid since the beginning of Russian aggression in 2014, would repeatedly freeze assistance across both Republican and Democratic administrations—even shortly before the invasion. Moreover, US deliveries of lethal assistance only started in 2017, and for the most part consisted of small arms, surveillance equipment, and portable anti-tank weapons (Javelins).

Image: Ukrainian service members unloading US-provided munitions, February 11, 2022. The United States and United Kingdom rushed hundreds of anti-tank missiles to Ukraine just prior to the start of the war in late February; by early March, as other NATO allies joined the effort, some 17,000 anti-tank weapons were flooded into the battlefield. However, the Russians had already begun to shift to artillery fires to support their invasion. The reactive nature of urgent aid, internal escalation management debates, and the logistical difficulties of dealing with a mishmash of platforms, necessitated a strategic-level organization to optimize future aid to Ukraine. (Image source: US Embassy Ukraine / Wikimedia Commons)

With the start of the war, the flow of Western weapons into Ukraine became a chaotic flood. The US European Command was hard-pressed to control the logistics of shipments, let alone validate what was required on the battlefield. The US Department of Defense started the Ukraine Defense Contact Group (UDCG) in April 2022 as an attempt to organize the assistance, with 40 countries participating. Since then, the UDCG has played a crucial coordinating role in supporting Ukraine's defense by organizing coherent military assistance, providing diverse military equipment and training to Ukrainian forces, sharing intelligence, and maintaining international pressure on Russia.

Eight "capability coalitions" were established around identified Ukraine defense needs: the Air Force Coalition, Artillery Coalition, Ground-Based Air Defense Coalition, Armor Coalition, Maritime Security Coalition, Demining Coalition, Information Technology Coalition, and Drone Coalition. These coalitions encompass high-level political and strategic cooperation between nations to not just fulfill immediate wartime requirements, but to build out medium-term logistics and maintenance support. Most importantly, they create long-term deterrence through projects to transform Ukraine's future force, as well as to expand both Ukraine and NATO's defense industrial base. As an additional benefit, NATO member participation in these coalitions will assist Ukraine in fulfilling the interoperability conditions for NATO ascension.

…Adapted for Taiwan

The Ukraine Defense Contact Group's strength is its ability to unite varying nations towards a common goal: providing coordinated short-term and long-term security assistance for Ukraine against Russian aggression. It fosters collaboration without requiring ideological alignment, with the inclusion of not just NATO allies but also non-NATO partners.

This is an ability that is sorely needed in the Indo-Pacific. Currently, Western countries apply a scattershot array of methods to assist Taiwan and deter the PRC from aggression. These efforts are not well-coordinated, given the enormous effort the PRC expends at preventing collective action—and the end result is hesitant, individual country action that elevates symbolism over practical effect, such as the recent debate regarding a *potential* German Navy Taiwan Strait transit. Even basic communication on defense issues between Taiwan and her neighbors is relatively limited, given the conspicuous lack of military representation by Japan, Australia, the Philippines, and South Korea in Taipei.

A "Taiwan Defense Contact Group," then, would start with a framework for multilateral *understanding*. Given that the United States is Taiwan's closest security partner, a US-led collaborative framework would allow other key allies and partners to access pre-existing contacts, speeding up the process of establishing regular communication and evaluating Taiwan's defense issues in their own national context. Issues to be addressed could include cooperative deterrent activities

to deter the adversary; development of a consensus on responses to escalating coercion; and when and how noncombatant evacuations would be conducted. Taiwan, in turn, could gain a better understanding of the differing national political thresholds at stake, and potential timelines for action.

The TDCG's objectives would be threefold. The first would be to bolster Taiwan's self-defense capabilities by providing essential military equipment, training, and intelligence support—in particular, weaponry or specialties that the United States is not best suited to provide. The second would be to organize and coordinate regional security activities so that the PRC cannot divide and conquer through gray-zone coercion. The third would be to signal to the PRC that attempts to isolate Taiwan from the international community will backfire.

China would likely perceive the TDCG as a direct challenge to its interests, and would likely react with economic coercion and military intimidation targeted against its members. To forestall this, a TDCG could be first established as a track 1.5 dialogue or an unofficial organization—on such grounds, simply establishing regular modes of communication would pay high dividends. If gray zone coercion continues to escalate or a crisis emerges, then this would provide the foundation for a transition into a formal organization.

The Russia-Ukraine War has driven autocratic cooperation in diplomacy, economics, propaganda, sanctions evasion, and military support. However the war ends, this will become an enduring feature of the international arena. Taiwan and her partners must adapt accordingly.

The main point: Autocratic powers are increasingly coordinating their military efforts across the globe. While Western countries are coordinating for the defense of Ukraine via the Ukraine Defense Contact Group, there is no similar organization for the Indo-Pacific region. As such, the UDCG serves as a model for potential future collaboration for both the defense of Taiwan and regional stability in the Indo-Pacific.

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Knowledge Knows No Boundaries: The UK-Taiwan Frontier in Academic Innovation

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Introduction

With new leadership, Taiwan and the United Kingdom stand poised to enhance their collaboration to reflect shared values and interests. Both nations are known for their robust democratic systems and innovative spirit, a basis for deepening ties. President Lai Ching-te's (賴清德) recent congratulatory message to UK Prime Minister Keir Starmer highlights the promise of renewed synergy in innovation and prosperity between the two states. The UK-Taiwan relationship, though unofficial, runs deep and enduring. Forged in the cauldron of post-World War II geopolitics, the UK-Taiwan bond has flourished despite the lack of formal diplomatic ties. Additionally, Britain's recognition of the People's Republic of China (PRC) hasn't dimmed Taiwan's allure as a democratic model and economic partner in East Asia. Even without official links, London and Taipei have assembled a network of connections in commerce, culture, and scholarly activities.

Informal pathways have enabled meaningful dialogue while sidestepping diplomatic landmines, providing a flexibility that is sometimes lacking in orthodox diplomacy. Through these connections, both parties can discover opportunities and sharpen their perceptions without the shackles of official protocol. As Taiwan suffers increasing isolation owing to Beijing's growing coercive pressure, alternative strands in engagement are indispensable in giving Taiwan an international voice and allowing other states, like the United Kingdom in a post-Brexit era, to tap into Taiwan's expertise in technology and economic innovation. As global power structures move, informal channels grow more significant, reiterating that productive diplomacy is not exclusively based on official recognition—but instead on constructing purposeful connections to bind political divides.

UK-Taiwan Educational Links

Educational exchanges between Taiwan and the United Kingdom epitomize the power of intellectual kin-

ship transcending political boundaries. The UK-Taiwan Higher Education Forum goes beyond research sharing: it is a setting for developing links among British and Taiwanese scholars, nurturing a shared ethos in academic freedom and critical inquiry. For example, joint research on sustainable energy conducted by Imperial College London and National Taiwan University (NTU, 國立臺灣大學), as demonstrated in the *2022 NTU Social Responsibility and Sustainability Report*, exhibits a mutual commitment to tackling global crises, proving that informal ties provide benefits to society.

In cultural diplomacy, as Taiwanese students immerse themselves in British literature at Oxford, or their UK counterparts probe Taiwan's indigenous languages at National Chengchi University (國立政治大學), they become cultural connectors. During these exchanges, preconceptions made by each group are contested, which encourages an insightful understanding that official diplomatic channels often fail to accomplish. As a result, academic ties are effective soft power instruments. While participation in UK-based conferences on democratic governance reinforces Taiwan's image as a beacon of democracy in Asia, British involvement in Taiwan's technology sector through research collaborations simultaneously boosts the United Kingdom's standing as an innovation hub.

Academic partnerships in the United Kingdom and Taiwan derive from the post-World War II epoch, when Taiwan's quest for modernization intersected with Britain's educational influence. Dr. Li Kwoh-ting (李國鼎), a former minister of economic affairs, previously studied in the United Kingdom. Recognizing the potential of British expertise in Taiwan's development, Dr. Li initiated discussions that led to the first wave of Taiwanese students pursuing advanced degrees in British universities.

The 1970s witnessed a surge in language programs, with the University of London's School of Oriental and African Studies (SOAS) pioneering Mandarin Chinese studies. The 1990s exemplified a transition towards institutionalized cooperation. The first memorandum of understanding (MOU) by the University of Oxford and NTU set a precedent for formal academic alliances. This decade also celebrated the introduction of Chevening Scholarships in Taiwan, funded by the UK government.

Thanks to prestigious universities and opportunities to explore Europe from a base in the United Kingdom, the United Kingdom is a top choice for Taiwanese students. In the 2022/23 academic year, 3,685 Taiwanese students were enrolled in UK universities, making the

Image: Li Kwoh-ting (1910-2001) was a distinguished economist and Cambridge University PhD alumnus, often called the "father of Taiwan's economic miracle." Li's work was instrumental in Taiwan's rapid economic development and modernization. Here, Li (left) poses for a photograph with other officials as he is appointed minister for economic affairs in 1965. (Image source: Wikimedia Commons)

United Kingdom is a top choice for Taiwanese students. In the 2022/23 academic year, 3,685 Taiwanese students were enrolled in UK universities, making the United Kingdom the top European destination (and fourth most popular choice worldwide) for students from Taiwan. The United Kingdom's strong educational reputation and opportunities for Taiwanese students to work there following graduation—such as through the Youth Mobility Scheme—have encouraged this growing appeal.

Technological advancements in the new millennium have reshaped academia. During this period, a marked focus on sustainable development and digital innovation has emerged. For instance, the Taiwan-UK Research Network began using digital platforms for real-time interactions among researchers. In 2021, the British Council and Taiwan's Ministry of Education (MOE, 教育部) signed a landmark agreement promoting educational exchanges, leading to a significant increase in student mobility. The establishment of the Taiwan-UK Innovative Industries Programme in 2017 also marked a progression towards targeted, industry-aligned research. This was further exemplified by the 2018 launch of the Taiwan Studies Programme at the University of Nottingham, which delivered a wide-ranging approach to studying Taiwan's society, politics, and culture. The Oxford Taiwan Studies Programme is dedicated to examining Taiwan's culture,

politics, and society through engaging lectures, panels, and discussions. Past events have tackled subjects like Taiwanese identity, nationalism, and the evolving nature of citizenship, providing fresh perspectives on Taiwan's place in the world. Open to scholars and the wider public alike, the program invites all who are interested in Taiwan's unique challenges and contributions on the global stage.

The philosophical undertones of such programs are extensive, as we are prompted to reconsider the nature of world relations in an interdependent world. Do not common values and intellectual endeavours constitute a form of *de facto* recognition, even more substantive than formal diplomatic ties? Furthermore, these connections embody Isaiah Berlin's concept of value pluralism. Academic exchanges and collaborations offer a unique opportunity for scholars to engage with diverse cultural and political perspectives, enriching their intellectual growth and challenging the notion that there is only one valid approach to understanding global issues.

Fresh Progress

The University of Liverpool's participation in the Taiwan-UK University Consortium demonstrates the transformative potential of academic exchanges. The first of its kind, this venture unites eight leading higher education institutions from Taiwan and the United Kingdom under the auspices of the British Council and Taiwan's MOE. In addition to fostering scholarly cooperation, all parties at the consortium address pressing international challenges in green energy and sustainability, and advance innovative educational methodologies—particularly in support of Taiwan's "Bilingual 2030 Policy."

This illustrates how academic collaboration acts as a catalyst for global change, where assorted perspectives and expertise converge to engineer solutions that no single institution or nation could achieve alone. Global challenges require global solutions, and collaborative UK-Taiwan successes highlight the value of universities as learning centers and indispensable actors in the quest for a sustainable, equitable world. One drawback of Brexit was the United Kingdom's exit from the Erasmus Scheme, a key European educational mobility program. However, the new Turing Scheme has emerged to offer funding for international educational opportunities. Among the early beneficiaries of the scheme, 28 students from the University of Bristol studied at National Sun Yat-sen University (中山大學), which was chosen as a top destination for learning Chinese.

Image: The University of Liverpool joins the Taiwan-UK University Consortium, a collaboration between eight top institutions. The official launch was marked by a MOU signed at Edinburgh University, supported by the British Council and Taiwan's MOE. (Image source: University of Liverpool)

Conundrums and Solutions

Challenges loom, primarily around funding and budget constraints that may lead to cutbacks or limitations impeding growth. Political pressures, especially from the PRC, pose significant challenges and can create a diplomatically sensitive environment that deters UK institutions from deepening ties with Taiwan. Chinese students represent a significant portion of the United Kingdom's international student body, and one major concern is the over reliance of UK universities on tuition fees from Chinese students. Financial dependencies make institutions wary of augmenting affiliations with Taiwan for fear of reprisal from the PRC, through reduced student enrolments, funding threats, or diplomatic backlash. The PRC has previously used its economic power and student leverage to pressure foreign institutions, including threats to restrict student visas. The reliance on Chinese students presents a dilemma: expanding ties with Taiwan could strengthen relations but risks losing significant funding if the PRC retaliates. As a result, universities face limitations that hinder their ability to fully explore affiliations with Taiwan, thereby impacting innovation and knowledge exchange.

However, one should remain optimistic. There are substantial opportunities for growth in UK-Taiwan academic relations, encompassing fields like artificial intelligence and digital transformation. In addition to addressing global challenges, these fields are likely to attract interest from both academic and governmental stakeholders. Boosting student and faculty mobility through additional scholarships and exchange

programs would enhance academic relations and integration. Moreover, virtual exchange programs offer a promising solution to overcome travel restrictions and enhance engagement in a cost-effective manner.

As the new Labour Party government under Prime Minister Keir Starmer charts the course for a global Britain, the United Kingdom stands at a crossroads, a moment with a unique opportunity to redefine and augment informal relations—both for the purpose of economic benefit, and as a testament to the value of academia in the globalized world. Furthermore, Taiwan should note the Labour Party's enthusiasm for expanding bilateral relations: during an April 2024 meeting with former President Tsai Ing-wen (蔡英文), Labour peer Lord Leong suggested his delegation could return as government officials to boost commercial, educational, and cultural ties. With Labour's recent victory, it will be interesting to see whether the party fulfils its commitments.

The United Kingdom and Taiwan, both islands on the edges of their continents, have historically punched above their weight in soft power. In both cases, their cultural and educational influence surpass their geographic size. British and Taiwanese institutions are world-class, producing top-tier talent. Instead of competing for dominance, collaboration offers greater potential, allowing scholars to pool resources, share knowledge, and address global issues more effectively. Academics should promote policies supporting and incentivizing cross-border networking. Scholarly output should be seen as a mutually beneficial endeavor, not a zero-sum game.

The main point: By strengthening bilateral ties, the UK can position itself as a gateway for Taiwan to develop closer links with Europe. UK universities can act as hubs for ideas and innovation, attracting talent and hosting conferences benefitting both nations and the global community—while scholars and students can unlock the full potential of UK-Taiwan relations beyond formal politics, extending connections beyond lecture halls and laboratories.

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Nuclear Safety and Energy Security in Taiwan: A Divided Society

By: Sylwia M. Gorska

Sylwia M. Gorska is a PhD student in International Relations at the University of Central Lancashire, UK, specializing in Japan's foreign policy.

In the 1970s, during a period of rapid industrialization and economic growth, and lacking significant natural energy resources, Taiwan began to rely on nuclear energy. By the mid-1980s, Taiwan had established three nuclear power plants with six active reactors: Jinshan (金山), Kuosheng (國聖), and Maanshan (馬鞍山). (A fourth plant in the northeast, Lungmen (龍門), never became fully operational.) These nuclear power plants were integral to the nation's energy mix, accounting for 52.4 percent of all electricity consumed during its peak in the 1980s. Nuclear energy generation increased significantly in 1982 and continued to rise at a similar rate until 1987.

The Democratic Progressive Party's (DPP, 民進黨) vision of creating a "nuclear-free homeland" by 2025 is central to Taiwan's national debate on energy policy. This vision was written into law in 2017 with an amendment to the *Electricity Act* (電業法), which states that Taiwan's nuclear reactors must be shut down as their 40-year licenses expire. As of today, Maanshan is the only operating nuclear power plant in Taiwan, and the decommissioning of unit 1 (also known as the Third Nuclear Power Plant) in Pingtung County (屏東縣), started as scheduled on July 27, 2024 with the expiration of its operating license.

The government's broader energy strategy aims to phase out nuclear energy, with production gradually decreasing over the years: in 2023, it accounted for only 6.3 percent of produced energy. The replacements would be a mix of 20 percent renewable energy, with the rest made up of liquefied natural gas (LNG) and coal by 2025. By 2023, Taiwan had achieved a mix of 9.5 percent renewable energy, 39.5 percent LNG, and 42.2 percent coal.

Energy Security: The Core of the Debate

Despite these clear goals, the policy has faced significant criticism, with the main argument being that the energy transition plan is overly ambitious and may compromise Taiwan's energy security. In recent years, the fragility of Taiwan's energy security has also been exacerbated by a series of power outages, which fuel

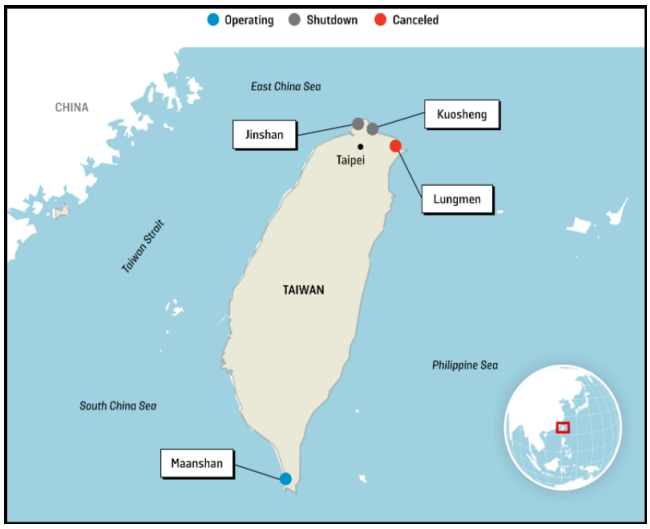

Image: The locations and operational status of nuclear power plants in Taiwan. (Image source: World Nuclear Association.)

public anxiety about the reliability of the nation's energy grid. For example, the June 15 power outage on Liuqiu Island (小琉球) during peak tourist season, which caused significant financial losses for local businesses, highlights the challenges of maintaining a stable power supply. Following these issues, state-run Taiwan Power Company (Taipower, 台灣電力公司) President Wang Yao-ting (王耀庭) offered his resignation, demonstrating that there was significant public and political pressure regarding the lack of power supply stability. However, Wang was encouraged to remain in the position.

A stable and reliable power supply is essential for maintaining economic growth and ensuring the well-being of Taiwan's population. Taiwan's technology sector, including giants like Taiwan Semiconductor Manufacturing Company (TSMC, 台灣積體電路製造股份有限公司), relies heavily on a stable and affordable power supply. Any disruptions or significant increases in energy costs could have ripple effects across the economy, potentially undermining Taiwan's competitive edge in the global market. The government's strategy to phase out nuclear power—while increasing reliance on renewable energy, and fossil fuels such as LNG—raises concerns about the long-term sustainability and security of the island's energy supply. As of 2023, renewable energy accounted for 9.5 percent of Taiwan's total electricity generation, far below the government's target of 20 percent by 2025. Additionally, the withdrawal of multiple Japanese companies from Taiwan's renewable energy market in 2023 further highlights the industry's difficulties. This shortfall has heightened public concerns about the feasibility of the government's energy transition plan.

The Societal Divide

Taiwan's debate over nuclear energy has seen divided public opinion on energy security and the potential risks of nuclear energy. This division intensified following the 2011 Fukushima Daiichi disaster in Japan. That catastrophic nuclear reactor meltdown increased global fears about the safety of nuclear power and had a profound impact on public opinion in Taiwan.

As a densely populated island prone to natural disasters, Taiwan became acutely aware of the potential dangers of nuclear power. The DPP capitalized on this public sentiment, embedding its "nuclear-free homeland" policy into the national agenda, which resonated strongly with a public increasingly wary of nuclear risks.

Additionally, nuclear waste management is among the most contentious issues in the nuclear debate. The Taiwanese government has faced criticism for its poor handling of nuclear waste, especially when it comes to the decision to store low-level radioactive waste (LLRW) on Orchid Island (Lanyu or 蘭嶼). The Taiwanese government began storing nuclear waste on Orchid Island in 1982 without adequately informing or obtaining consent from the Tao people—who were initially told the facility would be a fish cannery, not a nuclear waste storage site.

Moreover, reports have highlighted that nuclear waste has been stored in damaged, leaking barrels, raising serious safety and environmental concerns. Over-

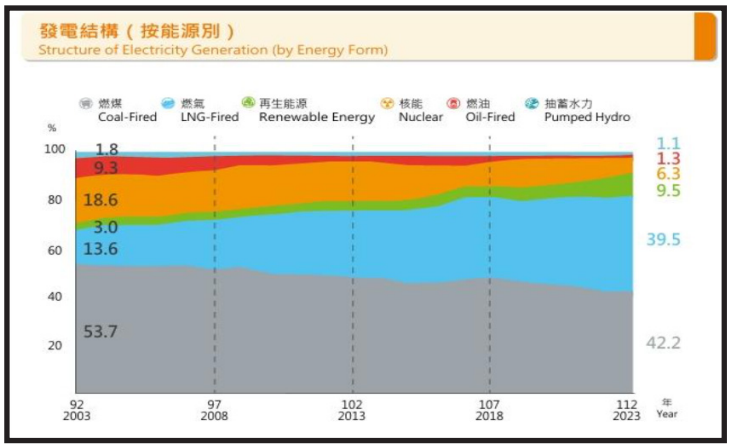

Image: Taiwan's electricity generation by energy form. (Image source: Energy Administration, ROC Ministry of Economic Affairs)

all, Taiwan has struggled to find permanent disposal solutions for LLRW—and this has contributed to the public's distrust of the government over the safety of nuclear energy, and created a negative perception of nuclear energy. Additionally, public concerns appear to be growing. In November 2018, a referendum question on nuclear power in Taiwan showed apparent support from 59 percent of voters for maintaining the island's nuclear power energy beyond 2025. In contrast, the 2021 referendum addressing whether to restart the construction of the Lungmen Nuclear Power Plant (the fourth nuclear power plant) was rejected with only 41 percent of voters supporting the restart.

Without nuclear energy, Taiwan would need to significantly increase its reliance on fossil fuels, leading to substantial carbon emissions. This shift would also necessitate an increase in fossil fuel imports, subjecting Taiwan's energy supplies to global price volatility and supply chain disruptions and making them a less stable energy source than domestically produced nuclear power. This overreliance on imported fossil fuels will compromise Taiwan's energy security, and conflict with the government's objectives of reducing carbon emissions and addressing climate change. Additionally, public opinion surveys indicate strong support for renewable energy sources. For instance, a recent study found that 83.7 percent of Taiwanese respondents favored renewable energy options such as solar, wind, and hydropower, while only 2.8 percent supported fossil fuels. [1] In short, Taiwanese society is deeply divided over nuclear energy and is influenced by safety concerns, environmental risks, and the desire for sustainable energy solutions.

Rethinking Nuclear Safety and Innovation

Given the challenges of phasing out nuclear power, Taiwan should reconsider its approach. Instead of an immediate phase-out, the government could prioritize enhancing the safety of its current nuclear infrastructure and explore advanced technologies. As President Lai Ching-te (賴清德) mentioned at the National Climate Change Response on August 8, the government intends to promote the diversification of forms of green energy—including new emerging and advanced nuclear energy technologies. This is a possible sign that discussions reevaluating the risks and benefits of nuclear energy have already begun.

Japan, similarly to Taiwan, is also prone to natural disasters—and Japan's frequent seismic activity has not resulted in a decision to phase out nuclear energy. Instead, it has significantly improved nuclear safety, particularly with small modular reactors (SMRs). These reactors, which are smaller, more flexible, and equipped with passive safety features, could be a viable option for Taiwan. They require less land and integrate well with renewable energy sources, offering a stable, low-carbon power supply. By investing in SMRs, Taiwan could enhance nuclear safety while gradually transitioning to renewables without compromising energy security. However, despite these safety improvements, their most significant disadvantage is that SMRs still generate radioactive waste of spent nuclear fuel that requires long-term management.

A potential solution for Taiwan's energy challenges and nuclear waste management could be adopting molten salt reactor (MSR) technology, mainly by using thorium-based reactors. China is progressing in this area, with plans to build a thorium reactor in the Gobi Desert starting in 2025. Thorium, a naturally occurring radioactive element, must first be converted to U-233 in a reactor to produce nuclear energy. These reactors use liquid salt or carbon dioxide for cooling instead of water, significantly reducing the risk of meltdowns. Taiwan could consider using similar technology to diversify its energy sources. Additionally, this technology would also significantly reduce the risks of nuclear meltdowns, making the public more likely to accept this technology. Compared with traditional nuclear reactors, SMRs and MSRs offer enhanced safety. However, the SMRs, due to their smaller size, may have a higher cost per unit, and MRSs with advanced materials and technology may be costly initially, but the cost will be rewarded through long-term efficiency.

Taiwan's potential adoption of advanced nuclear technologies like SMRs and MSRs could bolster energy security, safety, and environmental sustainability. By re-evaluating its nuclear energy strategy and exploring innovative reactor designs, Taiwan could diversify its energy mix, enhance efficiency, align with the net-zero emission goal by 2050, and build greater public acceptance of nuclear power.

The main point: While the government has set ambitious targets for renewable energy, these sectors have underperformed, leading to an overreliance on fossil fuels. Considering Taiwan's geographical limitations, there are fewer choices for energy diversification, and the most feasible energy production is nuclear energy. To ease the citizens' worries over the safety of nuclear energy, the government needs to invest in advanced nuclear technologies, enhance the safety of its existing nuclear infrastructure and nuclear waste management. At the same time, a gradual transition to renew-

able energy, supported by regional cooperation and innovation, can help Taiwan build a more resilient, safe and sustainable energy system.

[1] Giusto, Bruno Di, Joseph Lavallee, Igor Žilák, and Yvonne Hu Di Giusto. 2024. 'Public Opinion and the Energy Transition in East Asia: The Case of Taiwan'. Sustainability (Switzerland) 16 (10). https://doi.org/10.3390/su16104164.

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A New Frontier: PRC Flight Activity to the East of Taiwan

By: Benjamin Lewis and Thomas Shattuck

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Note: Information in this article is current as of September 1, 2024.

For approximately four years, the People's Liberation Army (PLA) of the People's Republic of China (PRC) has conducted regular operations within Taiwan's air defense identification zone (ADIZ). Throughout this period, these operations have shifted in geographic focus, and have evolved to elevate the coercive pressure and level of threat against Taipei. Originally, these incursions were primarily limited to the southwestern ADIZ region in the South China Sea (near Taiwan's Pratas/Dongsha island), and large-scale drills were tied to high-profile political events favoring Taiwan. Then, after the August 2022 visit to Taiwan by then-US House Speaker Nancy Pelosi, the ADIZ operations shifted from the South China Sea to the Taiwan Strait as the primary locus of activity. With its incursions over the last two years, the PRC has essentially erased the median line of the Taiwan Strait.

In 2024, the dynamics have shifted again, with the election and elevation of Lai Ching-te (賴清德) to the presidency in Taiwan. A notable development in this space was the introduction of balloons flying over and around Taiwan in the lead-up to the January 2024 election. In December 2023, 7 balloons were tracked in the ADIZ, but that figure increased in January and February (with 57 and 26, respectively). However, balloon tracking—while an interesting development—is not the most important issue for Taiwan's ADIZ in 2024 and in the Lai era beyond.

Now, flight activity to the east of Taiwan has become a more regular feature of the military status quo and ADIZ operations more generally. There are two broad patterns for such ADIZ activity: typical operations off Taiwan's east coast, and circumnavigation flights that eclipse both the northern and southern points of the island. This eastern activity is notable because it demonstrates a shift from training and navigation operations to testing likely combat concepts in the event of a blockade or military invasion of Taiwan. Expanding the "eastern front" shows an increase in sophistication from pilots, who are required to fly longer distances—including longer distances over water, further away from the PRC coastline—and possibly through the ADIZs of Japan or the Philippines.

Such missions point to the next step in the PRC's ADIZ operations: a move from signaling discontent and placing coercive pressure on Taiwan, to beginning to prepare pilots for an eventual contingency that requires a new set of competencies.

A Look at the Numbers

The PLA's aviation presence east of Taiwan can be divided into two categories: rotary-wing aircraft (helicopters) launched from PLA Navy (PLAN) vessels operating in the Western Pacific, and fixed-wing aircraft. While the near-constant presence of the PLAN east of Taiwan is troubling, an increasing number of fixed-wing aircraft launched from the PRC have conducted operations east of Taiwan since 2020, when Taiwan's Ministry of National Defense (MND, 國防部) began releasing reports on PLA and PLAN activity within the ADIZ. PRC military aircraft now regularly fly on both sides of the island, sandwiching Taiwan between military forces.

While Beijing is unlikely to cease its operations within the Taiwan Strait proper, the expansion of activity to the east of Taiwan presents a troubling development that Taiwan's military must counter.

In 2021, 59 fixed-wing PLA aircraft were tracked operating east of Taiwan, with eight instances of multi-aircraft flights. On only two days in 2021, 10 or more aircraft flew in this area on the same day or during the same operation. In 2022, that number decreased, with only 50 aircraft being tracked, with eight instances of multi-aircraft flights. On only one day did 10 or more aircraft fly to Taiwan's east on the same day or during

the same operation. Interestingly, Taiwan's MND did not report any activity to the country's east during the August 2022 PLA joint exercises in response to Pelosi's Taiwan visit *(see discussions here and here).* During those exercises, 446 PLA aircraft operated inside the ADIZ, but Taiwan's MND did not track aircraft east of the island even though the PLA and PLAN conducted operations off Taiwan's eastern shores during this time. [1]

In 2023, however, the figure nearly tripled, with 149 fixed-wing aircraft tracked east of Taiwan, including 18 instances of multi-aircraft flights. This time, Taiwan's MND reported activity during the PLA exercise *Joint Sword*, conducted in response to the California-based meeting between then-US House Speaker Kevin McCarthy and then-Taiwan President Tsai Ing-wen. On April 10, the MND reported 15 J-15 aircraft flying to Taiwan's east. On that day, 31 aircraft crossed the median line of the Taiwan Strait, for a total of 54 reported aircraft within the ADIZ on that date. During *Joint Sword*, 19 aircraft were tracked east of Taiwan over two days: all of them J-15s launched from the *Shandong* aircraft carrier group. In total for 2023, there were five dates on which the MND tracked more than 10 aircraft to Taiwan's east.

Between 2021 and 2023, the fighter aircraft most frequently operated to Taiwan's east were J-11s, J-15, and J-16s, alongside H-6 bomber aircraft. The most complex incursions—based on the mix of aircraft—occurred on December 21, 2022, and June 8, 2023. In the December 2022 incursion, H-6 bombers and J-16 fighter jets flew in tandem with a KJ-500 airborne early warning and control aircraft and Y-20 refueling aircraft. In the June 2023 mission, H-6 bombers, with J-11s and J-16s, flew with WZ-7 uncrewed aerial vehicles (UAV), Y-9 electronic intelligence aircraft, and Y-20U aerial refueling aircraft. The presence of the Y-20U in these types of operations suggests that at least one of the aircraft on the mission almost certainly refueled mid-flight. These types of mission makeups also occurred at smaller scale during this timeframe.

In 2024 (up to August 31st), the numbers point to Taiwan's eastern flank being a new area for focus by the PLA and PLAN. Overall, 140 fixed-wing aircraft have been tracked around Taiwan's east, including 18 instances of multi-aircraft flights. Notably, all of the days in which more than 10 aircraft were tracked to Taiwan's east (to date, four in total) occurred after the inauguration of Lai. Two of those dates include the *Joint Sword 2024A* exercise that occurred in direct response to Lai's inauguration in May 2024. Given the January 2024 changes in how Taiwan's MND reports ADIZ activity, it is unknown what specific types of aircraft have flown to Taiwan's east since then. While unknown types of UAVs have been tracked, any further details are unavailable as to what aircraft are involved in these activities. This point demonstrates one of the multiple major downsides to the MND's January 2024 changes to ADIZ reports.

In addition to the increase in instances where multiple fixed-wing aircraft were tracked east of Taiwan on the same day, the average number of aircraft tracked in those instances has also increased. In 2021, the average number of aircraft tracked was 7; in 2022, it was 4.75; in 2023, it was 7.44; and 2024, it is 7.78 thus far. These averages demonstrate a slow, but steady, increase in the PLA and PLAN's aerial operations to Taiwan's east.

Why Does This Matter?

These overall figures for aviation activity to Taiwan's east are small compared to the overall figures for PLA and PLAN ADIZ activity, but the implications of this increase are important. During this same timeframe, activity over the median line of the Taiwan Strait has skyrocketed. In 2020, 22 aircraft were tracked crossing the median line (with no such activity in 2021). The year 2022 marked a stark shift in the PRC's focus in the ADIZ: with 565 aircraft tracked crossing the median line, followed by 703 in 2023 and 805 in 2024 (to date). Overall, ADIZ activity has also trended upward: between 381-390 sorties in 2020; 972 in 2021; 1,738 in 2022; 1,703 in 2023; and 1,905 in 2024 (to date). Compared to the activity in other areas, the PLA's presence east of Taiwan appears negligible.

However, the trends for eastern side flight activity are concerning because they are not occurring in a vacuum. Such flights are occurring in tandem with other aerial or naval activity around Taiwan, which increases the burden on Taiwan's already limited resources. If the trends in the east continue, Taipei will be forced to make difficult decisions on how to respond to this activity, and will need to prioritize some geographic areas over others. Do you focus on the Taiwan Strait because there is more activity there, and it is considered a geopolitical hotspot? Does Taipei cede its east because it's theoretically more difficult for the PLA to get to, and because of the overall lower level of activity?

We know from past policy changes by Taipei that the ADIZ incursions are having an immense impact on the MND and Taiwan's military. In 2021, Taipei stopped the policy of intercepting every single sortie because

it was breaking the MND's budget, and began tracking aircraft with ground-based missiles instead. In 2020, the MND spent nearly nine percent of its total budget on intercepting, monitoring, and detecting ADIZ incursions. What happens when the activity to Taiwan's east continues to increase to the level of activity in the southwestern ADIZ in late 2020 and early 2021, which forced those policy changes? The PRC is increasingly surrounding Taiwan at all sides in the air (and at sea), so this developing trend in the Western Pacific is important to analyze at this somewhat early stage—before it becomes the next Taiwan Strait in terms of regular activity.

The main point: Since Taiwan's MND began tracking and reporting on PRC military aircraft within its air defense identification zone in September 2020, three trends can be identified: (1) the number of PLA aircraft operating east of Taiwan is increasing; (2) the number of multi-aircraft flights east of Taiwan is increasing; and (3) the number of aircraft taking part in multi-aircraft flights east of Taiwan is increasing.

[1] Figures on PLA flight activity are drawn from the "Taiwan ADIZ Violations Database" maintained by PLATracker: https://docs.google.com/spreadsheets/d/1qbfY-F0VgDBJoFZN5elpZwNTiKZ4nvCUcs5a7oYwm52g/edit?gid=2051027998#gid=2051027998.

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