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A Threshold Alliance: The China-Pakistan Military Relationship

By Sameer P. Lalwani



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A JF-17 jet, jointly manufactured by China and Pakistan, flies over Islamabad, Pakistan, during a Defense Day celebration on September 6, 2015. (Photo by Anjum Naveed/AP)

Summary

- Despite China's eschewal of formal alliances, the China-Pakistan military partnership has deepened significantly over the past decade, approaching a threshold alliance. The trajectory toward a military alliance is not, however, inevitable.
- China is Pakistan's most important defense partner since the end of the Cold War. Beijing has become the leading supplier of Pakistan's conventional weapons and stra-



tegic platforms and the dominant supplier of Pakistan's higher-end offensive strike capabilities.

 China's military diplomacy with Pakistan quantitatively and qualitatively rivals its military partnership with Russia. China and Pakistan have accelerated the tempo of joint military exercises, which are growing in complexity and interoperability. Increasingly compatible arms supply chains and networked communications systems could allow the countries to aggregate their defense capabilities.

• The prospects for China projecting military power over the Indian Ocean from Pakistan's Western coast are growing. Chinese basing has meaningful support within Pakistan's strategic circles. The material and political obstacles to upgrading naval access into wartime contingency basing appear to be surmountable and diminishing over time.

SPECIAL REPORT

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ABOUT THE REPORT

Drawing on open-source information, personal interviews, and expert assessments, this report explores the growing China-Pakistan military relationship and considers ramifications for China's potential future alliances in the region. Research was supported by the South Asia Program at the United States Institute of Peace.

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Warships take part in the Pakistan Navy's AMAN-23 military exercise in the Arabian Sea near Karachi, Pakistan, on February 13, 2023. Ships from more than 50 countries, including the United States and China, participated in the five-day exercise. (Photo by Fareed Khan/AP)

Introduction

In the late 1980s, the US intelligence community judged Pakistan to be nuclear-capable, one source describing it as "two screwdriver turns' away from [having] a fully assembled nuclear weapon."¹ Although Pakistan would not emerge as an overt nuclear weapons power until a decade later, from the time of that US evaluation, it was considered to be a "threshold state." This term describes a country that has accumulated the material conditions and technical capacity to quickly transform an ostensibly peaceful nuclear program into a weapons program should it choose, a condition sometimes characterized as "nuclear latency."² A decade later, when Pakistan followed India in conducting nuclear tests in May 1998, the country emerged as an undeniable nuclear power that its neighbors and other major powers had to reckon with. Today, the true scope of Pakistan's military relationship with China remains less perceptible but approaches an equally precipitous threshold.

China, for its part, eschews formal alliances but seeks quasi-alliances in pursuit of a variety of interests, including capability aggregation, risk pooling, burden sharing, geographic access, and power projection.³ Although the lineaments of a China-Pakistan military relationship have been strengthening over several decades, the relationship has significantly deepened over the past 10 years with respect to increased capabilities and mutual support activities, and potential interest in basing and colocation of forces. As a result, the relationship between the two countries may now constitute a "threshold alliance," despite China's avoidance of the term "alliance" and

Pakistan's professed determination to maintain a balance between US and Chinese influence. The latent capacity of the China-Pakistan military partnership—measured in terms of arms transfers, military exercises, and basing prospects-advances both countries' peacetime interests, but also allows the option of burden sharing and interoperability in a crisis. If either country's political calculus changes, most of the material and technical conditions for an alliance may already be in place.

Geopolitical shifts in South Asia over the past five years—in particular, sharper US-China competition, the precipitous decline in China-India relations after multiple and ongoing border skirmishes, and the 2021 withdrawal of US forces from Afghanistan-have prompted changes in the China-Pakistan relationship. As China searches for partners and has become more open about seeking overseas military bases, which it terms "strategic strong points," it has become increasingly eager to enhance military cooperation with two key states, Russia and Pakistan.⁴

The Russia-China relationship was attracting scholarly and policymaking interest even before Russia's invasion of Ukraine, and much of the attention paid to China's search for military partners has focused on Russia.⁵ By contrast, the China-Pakistan military relationship is often discounted but rarely closely interrogated, aside from the nuclear weapons program.⁶ Still, several China military experts regard Beijing's strategic relationship with Islamabad as something as formidable and consequential as Beijing's relationship with Moscow.⁷

In the absence of a formal military alliance or mutual defense treaty, how might the China-Pakistan military axis be characterized? What functions, such as logistical support links, basing, capability aggregation, or diversion of adversaries, might China's military be seeking from a partner? And what resources, such as critical minerals, data, or legitimacy, might China hope to leverage? These are key questions for US policymakers and strategists.

Military alliances are, at core, a set of wartime coordination plans for mutual defense.⁸ This report advances the concept of a "threshold alliance" to capture a state of military relations short of a formal treaty alliance but much more advanced than the increasingly ubiquitous "defense cooperation agreements."9 The material and technical conditions and military interoperability of a threshold alliance move the defense relationship to the edge of wartime coordination, but short of written-down, specific mutual defense commitments.¹⁰

Threshold alliances arguably fit within a growing array of great power competitive behaviors where significant effort and resources are invested in dormant capacity in order to one day flip a switch after a critical political decision. Such alliances are related to similar types of latent military capability building or "covert balancing," such as China's development of unconventional power projection and American investments in the maritime domain awareness competencies of unaligned partners.¹¹ Threshold alliances may have similar geopolitical effects as nuclear latency; both may assure, embolden, deter, or apply leverage in crisis bargaining.¹²

Forming threshold alliances involves developing military-technical interoperability. Some interoperability of two militaries' matériel, organizations, and geographic access-while insufficient for a formal mutual defense alliance-is arguably a necessary precursor to joint war plans on the modern battlefield. With the increasing complexity of warfare demanding complicated equipment and increased decision speed, allies that want to meaningfully support each other will require advanced levels of military interoperability.¹³

Interoperability in turn requires compatible hardware, communications and information systems that can talk to one another, interpersonal familiarity at the soldier and command levels, and shared procedures.¹⁴ Shared equipment, routinized joint exercises, and frequent interaction from staff exchanges or colocation help build interoperability. Countries that collaborate in the production of such equipment can develop an interoperable defense industrial base with an interchangeable supply of spares and maintenance capacity. In other words, shared equipment and battle networks, joint production, and familiarity with each other's command style and tactics, techniques, and procedures all enable greater operational compatibility and dramatically lower the coordination costs of joint war planning and campaigns.¹⁵

Drawing on open-source information and analysis, newly compiled datasets, and insights from Pakistan's own strategic debates, this report examines how China and Pakistan appear to be building these shared capabilities and interoperability through arms transfers, exercises, and basing. It seeks to provide clarity to the current China-Pakistan military relationship and suggest how it could evolve in the future by scrutinizing the scope, volume, and quality of China's and Pakistan's military interactions. Undoubtedly there are several political, economic, and ideological factors that may also be consequential drivers and measures of alignment, but this report narrowly focuses on three critical measures of defense relations.

The report explores China-Pakistan military cooperation through three areas: arms transfers and co-development, military diplomacy and exercises, and military basing preparations and contingencies. It concludes with analysis of indicators, friction points, and future trajectories in the relationship.

Arms Transfers

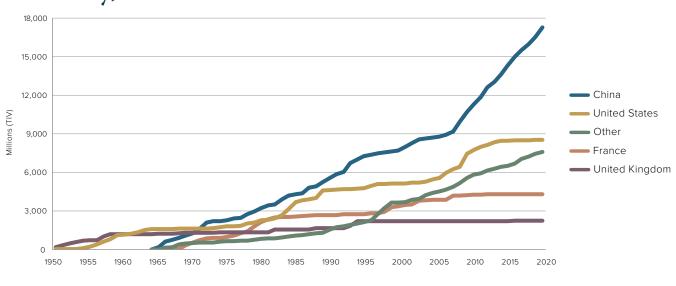
China has been a stalwart supporter of Pakistan's conventional arsenal since the 1960s and the country's most important defense partner since the end of the Cold War. Over the past decade, China has become Pakistan's leading and most important provider of arms as measured by value (see figure 1 on page 6), and Pakistan has become China's largest and most important arms recipient, acquiring almost 40 percent of Beijing's arms exports.

The Stockholm International Peace Research Institute's Arms Transfers Database suggests that while the United States is one of the oldest and largest contributors to Pakistan's conventional arsenal, by 1972 China had become its leading supplier of arms in terms of cumulative value, a status it has maintained. Pakistan received significant injections of US arms during the Afghan jihad in the 1980s and during the war on terror (particularly from 2005 to 2015), but the volume of US arms never caught up with that of Chinese arms transfers, which began a steep ascent around 2009. The dramatic growth in arms transfers is clear when looking at trend-indicator value (TIV), a measure of the volume of international arms transfers that represents relative military resources rather than the financial value: The estimated value of Chinese arms transfered to Pakistan in the past 15 years (\$8,469 million TIV) is nearly equal to the estimated value of arms transferred to Pakistan by China in the previous 50 years (\$8,794 million TIV). Since 2015, China has provided nearly 75 percent of all of Pakistan's imported arms (by TIV).

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FIGURE 1.

Cumulative value of arms transferred to Pakistan, by country, 1950–2021



Note: Data from Stockholm International Peace Research Institute Arms Transfer Database, www.sipri.org/databases/armstransfers. Data are expressed in terms of their trend-indicator value (TIV), a measurement of the volume based on military resources rather than financial value.

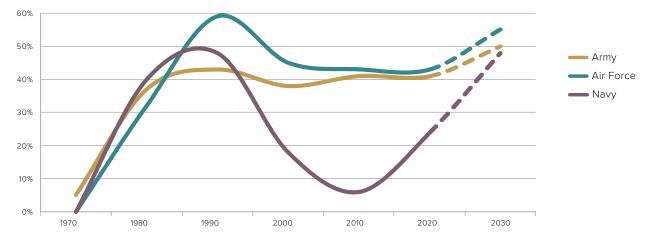
A look at specific equipment transfers further underscores China's importance to Pakistan's combat capabilities and conventional defenses. Since 1970, the United States and China have been trading places as the leading providers of Pakistan's defense capabilities in terms of pieces of major equipment. Today, China is the dominant provider in raw quantity and dominates in the most critical areas, and its level of support could grow over the next decade (see figure 2 on page 7).

While the United States transferred thousands of excess defense articles to Pakistan as it drew down forces from Afghanistan over the preceding decade, China has grown as the leading supplier of the Pakistan Army's combat power as Western-supplied equipment shifts from combat platforms to supporting elements (intelligence, transport, logistics). China is the undisputed dominant supplier of the Pakistan Army and Pakistan Air Force (PAF), and although the Pakistan Navy has effectively diversified, China is still its largest provider of major combat platforms.

China's contribution to Pakistan's combat capability becomes even more apparent when each service's equipment is disaggregated by source (see tables 1–3 on page 10). Despite the historical attention paid to Pakistan's three F-16 fighter squadrons, each comprising 18–24 of its most advanced combat aircraft, Chinese platforms such as the JF-17 multirole combat aircraft make up the largest share of Pakistan's modern fighter fleet, while the China-supplied F-7, designed for short-range air-to-air combat, forms the backbone of the legacy attack aircraft fleet. Chinese-origin equipment also constitutes the majority of the army's offensive armor and support units used in fire missions, such as artillery and rocket launchers, even as China contributes

FIGURE 2.

Share of Pakistan's total military equipment supplied by China, by service, 1970–2020, and projected to 2030



Note: Author's coding of data based on The International Institute for Strategic Studies, *The Military Balance*, 1970, 1980, 1990, 2000, 2010, and 2020 editions. Percentages for 2030 are the author's projections based on public reporting on future platform acquisitions and retirements. Air force percentages represent only aircraft and exclude ground air defenses; similarly, navy percentages represent only ships and exclude limited naval aviation.

substantially less to the army's infantry vehicles and aviation units. And though Pakistan's navy at first glance looks quite diversified, controlling for combatant ships, displacement tonnage, or missile cells reveals how much naval battle force combat potential is sourced from China.¹⁶ Understanding China's imprint on the Pakistan military requires a close look at each service.

AIR FORCE

Since the early 1970s, China has been the largest provider of the PAF's aviation assets by total volume. By 1990, it had become the source of more than half the fighter and support aircraft. Although that figure has declined to around 43 percent in the past two decades, the number of Chinese-origin aircraft is more than double that of the next leading provider, the United States, and is poised to rise in the coming decade. While the PAF has historically been one of the most prominent operators of the US F-16 fighter, the service's future is undoubtedly intertwined with China's.

China has been the leading source of Pakistan's fighter aircraft since 1980 and is poised to continue this trajectory with new production of the fourth-generation JF-17 block III, as well as the recent sale and transfer of the 4.5-generation fighter J-10CP, considered on par with the modern US F-16.¹⁷ At present, the PAF fields six squadrons of JF-17s and J-10s compared to three squadrons of F-16s. Continued induction of these fourth-generation and later frontline fighter aircraft, along with comprehensive integrated air defense and electronic warfare networks, geospatial data acquisition abilities, and satellite navigation, will make Pakistan's air power a seamless system dependent on and integrable with China's military, the People's Liberation Army (PLA).

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Pakistan began procuring the JF-17 in 2007 as a lightweight combat aircraft similar in design to the US F-20 Tigershark. Though billed as a joint project of Pakistan and China, the JF-17's design and development were principally conducted in China, with modest design inputs from Pakistan.¹⁸ Pakistan has acquired approximately 125 JF-17s, with an expectation of acquiring between 170 and 250 total, likely replacing legacy fighter aircraft by 2025.¹⁹ As one former PAF officer noted, while the JF-17 is outclassed by India's "omnicraft" Rafale fighter jet (from the French company Dassault), Pakistan can acquire three JF-17 block III aircraft for the cost of one Rafale.²⁰ Future JF-17 variants are likely to be equipped with standoff weapons capabilities such as anti-ship cruise missiles or heavier air-launched cruise missiles, as well as electronic countermeasures to defend against advanced electronic warfare.²¹ Pakistan can also export the JF-17 to developing states like Azerbaijan, Myanmar, and Nigeria as a replacement for older-generation Russian or Chinese fighters.²²

One challenge is that the JF-17, like most Chinese airframes, still relies on the Russian RD-93 engine. Engine replacement and overhaul have proven fraught since the United States placed sanctions on Russia in 2018 and may become even more difficult because of the invasion of Ukraine, affecting the readiness of Pakistan's JF-17 fleet or further exports.

In 2009, Pakistan reportedly entered into an agreement to purchase 36 of China's 4.5-generation J-10 medium multirole fighter aircraft.²³ Pakistan's decade of economic and internal security woes set back the agreement timeline more than a decade, but it revisited this platform in earnest after US financing for the F-16 C/D block was denied. In June 2021, Pakistan signed a contract to purchase the J-10CE; and by March 2022, it was taking delivery. Recent reporting indicated Pakistan had agreed to purchase 20–25 J-10s, and some analysts expect it to procure at least 90 J-10s through the 2020s and 2030s.²⁴

The J-10 is a formidable platform designed for aerial combat with an active electronically scanned array radar and a PL-15E air-to-air missile that can outrange the US AMRAAM (Advanced Medium-Range Air-to-Air Missile).²⁵ This is particularly important because while the United States supplies what is considered Pakistan's most combat-capable fighter aircraft, the F-16, without US contracts for maintenance and upgrades, these jets could fall into an "inoperable state" due to technology restrictions and the necessity of US servicing for major components.²⁶ Pakistan is likely to try to keep its F-16 squadrons in service over the next decade as it phases out most of its Mirage III and Mirage 5 fleet. The J-10 may also replace the Mirage as the platform designated for nuclear delivery missions. If the United States believes its F-16 sales afforded it leverage over Islamabad, it should expect China to have significantly more leverage with its provision of over 80 percent of Pakistan's advanced combat air power.

For supporting elements, the PAF is inducting into the fleet China's medium-altitude long-endurance Wing Loong 2, an uncrewed combat aerial vehicle designed both for carrying out precision strikes and as an intelligence, surveillance, and reconnaissance (ISR) platform. The Wing Loong 2 will complement the PAF's other indigenous and Turkish-origin drone fleet.²⁷ The PAF will also be relying on China in efforts to contest the electromagnetic spectrum with the planned acquisition of dozens of ground-based mobile electronic warfare systems for long-range radar jamming.²⁸

ARMY

During the 1965 war with India, Pakistan Army matériel was mostly of US origin. Since 1970, however, China's contributions to the Pakistan Army have climbed steadily, outstripping US equipment transfers in raw number of platforms by the 1990s. The recent rise in US equipment can be attributed in part to the US Department of Defense's Excess Defense Articles program, which transferred an enormous amount of hardware—roughly 1,400 armored personnel carriers, Mine-Resistant Ambush Protected (MRAP) vehicles, and MRAP Recovery vehicles, with an estimated value of \$500 million—as the United States shifted away from its counterinsurgency mission in Afghanistan.²⁹

Despite the increase in US contributions, the Pakistan Army's most potent offensive and combat capabilities increasingly depend on China. The United States supplied a significant number of infantry fighting vehicles, but nearly all tanks and a substantial portion of artillery and rocket launchers continue to be sourced from China. Looking forward, Pakistan is seeking to modernize its armored fleet with China's VT4 (MBT-3000), a 52-ton main battle tank designed and manufactured by the China North Industries Corporation (NORINCO). Even the domestic production of the al-Khalid 2 tank, for which China is a critical design partner, will rely on China's VT-4 tank technology and subsystems.³⁰

While Western suppliers currently dominate Pakistan Army aviation assets, this too is likely to change dramatically over the next decade. Pakistan's inability to procure US or Turkish systems to replace its aging Cobra attack helicopters means it is likely to seek Z-10MEs, the Chinese alternative.³¹

Consistent with the direction of air force asset sourcing, advanced integrated air defenses (which are broadly controlled by the army) are almost all supplied by China.³² For example, the Army and Air Force's Comprehensive Layered Integrated Air Defence, which was formerly composed of a diverse mix of French, Italian, and Chinese systems, is now primarily composed of systems sourced from China over the past decade. Within this "system of systems," the HQ-7/FM-90 provides low-altitude defense (and possibly defense for forward-deployed armored and artillery units), the HQ-16/LY-80 and the European MBDA Spada 2000 provide low- to medium-altitude defense, and the HQ-9P provides medium- to high-altitude defense. China even fast-tracked the most recently acquired layer, the HQ-9 system, comparable to Russia's S-300, after India's 2019 airstrikes on Balakot, deep inside Pakistan, against an alleged terrorist training camp. In the wake of the crisis, Pakistan explored acquiring the S-300 system, but Russia doubted Pakistan had the budget for it and refused to provide financial assistance commensurate with what China could offer.³³ Four units (presumably batteries) of China's HQ-9/P were inducted in October 2021, and four more were expected in 2022.³⁴

Increasingly compatible supply chains for armor, artillery, and rocket launchers (support units for fire systems); networked communications and information systems; and interoperable air defenses and electronic warfare systems have moved Pakistan and China closer to being able to aggregate their military capabilities should they make the strategic decision to do so.

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TABLE 1. PAKISTAN AIR FORCE PLATFORMS BY COUNTRY OF ORIGIN

	Total platforms (%)	Legacy attack (%)	Modern attack (%)	ISR, transport (%)	Command & control (%)	Training (%)	Helicopters
China	45	55	65	4	33	27	0
United States	20	0	35	45	0	16	0
Russia	1	0	0	8	0	0	12
France	17	45	0	22	17	0	46
Pakistan	13	0	0	0	0	56	0
Other	5	0	0	20	50	0	42

China is overwhelmingly the Pakistan Air Force's largest supplier of combat attack platforms.

Note: Legacy attack refers to second- and third-generation fighters, including Chinese F7 and French Mirage III and Mirage 5 variants. Modern attack refers to fourth-generation fighters, including Chinese JF-17 and American F-16 variants. ISR stands for intelligence, surveillance, and reconnaissance systems. Percentages for Russia include equipment sourced from the Soviet Union. Due to round-ing, columns may not add up to 100 percent.

TABLE 2. PAKISTAN ARMY PLATFORMS BY COUNTRY OF ORIGIN

China is by far the largest provider of the Pakistan Army's offensive capabilities, including a majority of tanks and howitzer and rocket artillery systems.

	Total platforms (%)	Tanks (%)	IFVs and APCs (%)	Fire units (%)	Air defense (army & air force) (%)	Anti-aircraft artillery (%)	Army aviation (%)
China	42	68	7	51	18	74	3
United States	33	0	68	39	0	0	31
Russia	3	0	3	0	0	10	14
France	1	0	0	0	65	0	26
Pakistan	7	20	5	0	0	0	25
Other	13	12	16	10	18	15	2

Note: IFV stands for infantry fighting vehicles. APC stands for armored personnel carriers. Air defense percentages are combined army and air force assets. Percentages for Russia include equipment sourced from the Soviet Union. Total platforms percentages do not include small arms. Due to rounding, columns may not add up to 100 percent.

TABLE 3. PAKISTAN NAVY PLATFORMS BY COUNTRY OF ORIGIN

While the Pakistan Navy is quite diversified in terms of sourcing ships, the majority of its combat power—measured in combatant ship displacement and missile cells—is from China.

	Total ships (%)	Total displacement tonnage (%)	Combatant ships (%)	Combatant ship displacement (%)	Ship missile cells (%)	Naval aviation (%)
China	22	44	28	48	79	19
United States	2	5	3	10	0	19
France	15	11	14	18	4	22
Pakistan	17	9	14	2	5	0
UK	17	4	6	9	8	16
Other	28	27	36	13	5	24

Note: Due to rounding, percentages do not add up to 100 percent.

Source: Author's coding of platform country origin based on data from the International Institute for Strategic Studies, *The Military Balance 2023* (London: Routledge, 2023).

NAVY

Pakistan's navy, the country's smallest service, has maintained a relatively balanced set of suppliers for decades (see table 3 on page 10). In tandem with its growing fleet of Chinese ships, it has retained ships supplied by a diverse set of countries, including Turkey and the UK. The navy has depended mainly on France for its undersea capabilities and on the United States and Europe for much of its naval aviation assets. However, a closer analysis of the fleet based on displacement or missile cells reveals how the Pakistan Navy's combat capabilities are increasingly dependent on Chinese platforms (see table 3 on page 10).

The navy's dependence on China is poised to deepen as modernization—with the goal of a 50-ship surface fleet, with 40 percent of that number being major surface combatants—will rely heavily on Beijing.³⁵ Over the next decade, Pakistan will induct Chinese Type 054A/P frigates, and potentially even a destroyer, alongside its already deployed F-22 frigate for sea control. For anti-access/area denial (A2AD) missions, the navy plans to use Chinese Type 039A attack submarines with air-independent propulsion that carry both torpedoes and anti-ship cruise missiles.³⁶ Pakistan was initially scheduled to receive four of these submarines by 2023 and to build four more by 2028. This timeline was delayed by the COVID-19 pandemic and unexpected export control decisions, such as Germany's decision not to sell diesel engines to China because of their use for military purposes.³⁷ However, recent reports suggest Pakistan is scheduled to receive a submarine every six months beginning in 2024.³⁸ In addition to submarines, the PAF and the navy appear to be buying C-802 anti-ship cruise missiles, equipped with a solid rocket booster for extended range, which can be launched from ships, land, or aircraft.

For a service that traditionally receives the smallest budget allocation, the navy's unprecedented and highly expensive modernization raises questions about how Pakistan expects to pay for its development. Interest-free loans and military financing from China are likely sources of funding, with some analysts assessing that Pakistan has been receiving around \$225 million annually in Chinese military aid since 2015, after President Xi Jinping visited Pakistan and elevated the China-Pakistan Economic Corridor (CPEC) to be the flagship project of the Belt and Road Initiative (BRI).³⁹

NUCLEAR AND STRATEGIC CAPABILITIES

Perhaps China's most important contribution to Pakistan's defense capabilities is its assistance in the nuclear weapons program and broader strategic deterrence elements. Between the 1970s and the 1990s, China helped Pakistan with nuclear enrichment, including providing feedstock for Pakistan's enrichment centrifuges, operating Pakistan's heavy water reactor, constructing plutonium-producing reactors, and directly transferring weapons-grade highly enriched uranium. China helped with Pakistan's nuclear weaponization, including bomb designs and the development of high-explosive components; and with nuclear weapons delivery capabilities, including the development and transfer of solid-propellant missiles as a nuclear delivery platform.⁴⁰

More recently, China has further advanced Pakistan's strategic defense capabilities by providing enabling features such as space access and advanced optical tracking systems for the development of multiple independent reentry vehicles.⁴¹ Some analysts have suggested that China may assist Pakistan in developing or acquiring hypersonic weapons such as the Dongfeng DF-17 MRBM, a medium-range ballistic missile equipped with a hypersonic glide vehicle, all mounted on a road-mobile vehicle.⁴² Some also have claimed China could provide assistance as Pakistan openly pursues the development of an anti-ship ballistic missile (P-282) modeled on China's DF-21D.⁴³ While speculative, such predictions have some purchase given that nearly every past missile added to Pakistan's arsenal seems to have been derived from a Chinese prototype.⁴⁴

Pakistan's conventional arms appear to be increasingly tied to and dependent on China's BeiDou navigation satellite system for positioning, navigation, and timing, particularly its leading air-delivered strike capabilities, such as the Raad II and Babur cruise missiles, and the Ababeel ballistic missile.⁴⁵ In 2013, Pakistan was the first country to gain access to BeiDou's restrictive service after it signed an agreement to install five BeiDou ground augmentation stations and one processing center—all at subsidized cost—to enable better precision and accuracy.⁴⁶ Some claim the Pakistan military is the only military with access to the full BeiDou systems used by the PLA, which also enable precision-guided munitions such as the Fatah-1 guided Multiple Launch Rocket System.⁴⁷ Some analysts contend BeiDou satellite access combined with Huawei 5G communications networks also enhance Pakistan's cyber and electronic warfare capabilities.⁴⁸ In fact, Huawei has not only invested heavily in Pakistan's civilian cloud data centers, but also appears to have helped build Pakistan's Army Cyber Command and Army Centre of Emerging Technologies.⁴⁹ For its part, the PLA's Strategic Support Force Space Systems Department, in charge of PLA space operations, operates tracking, telemetry, and command stations in Pakistan.⁵⁰

TECHNOLOGY TRANSFERS

Although American officers who spent time at the Command and Staff College in Quetta observed that Pakistan military personnel viewed Chinese weapons systems as relatively cheap, unreliable, and not comparable to Western technology, China has abetted Pakistan's emerging defense industry through some limited indigenization and technology transfers that continue to grow.⁵¹

The Pakistan Aeronautical Complex, built in the 1970s and 1980s principally as a means to overhaul Pakistan's fleet of Chinese F-6 fighter aircraft, constitutes the most important component of the technology partnership. Today, the complex, located in the city of Kamra in Pakistan's Punjab Province, serves as a hub for both military aircraft production and maintenance, repair, and overhaul, including for the JF-17.⁵² Pakistan has increased its share of indigenous production at the complex from 16 percent of the K-8 airframe in the 1990s to 58 percent of the JF-17 airframe, including the wings, horizontal stabilizer, and vertical tail, as well as assembly of the radar.⁵³ Kamra's "Aviation City" initiative was announced in 2017. It complements the aviation complex and is intended to build the academic, research and development, and engineering foundations that will allow Pakistan to pursue self-reliance and develop the capacity to produce navigation, radar, and onboard weapons systems for a next-generation fighter program (though Pakistan may be behind in this process).⁵⁴

Despite the asymmetrical relationship between China and Pakistan, technology transfers have not been one-way only. Pakistan facilitated China's missile program through the transfer of unexploded Tomahawk missiles that landed in Afghanistan; reverse engineering helped China create its air-launched KD-20 cruise missile and the ground-launched DH-10 cruise missile. China then used this technology to help Pakistan develop its Babur missiles.⁵⁵ Moreover, Pakistan is believed

to have given China access to stealth technology by providing samples of the Black Hawk helicopter that crashed during the 2011 Abbottabad mission to eliminate Osama Bin Laden.⁵⁶

In summary, over the past 20 years, China has overtaken all other countries as the leading supplier of high-end defense platforms to all of Pakistan's military services. Regardless of the state of Pakistan's relations with the West, its workhorse weapons systems were bound to be procured from China because of budgetary constraints.⁵⁷ China's dominance of Pakistan's military hardware, especially its frontline combat platforms, will likely grow once equipment of Western origin is retired and more modern Chinese systems come online, such as the J-10 fighter, the Type 039A submarine, and the VT-4 tank.

The implications of China's outsize contribution and influence over Pakistan's military force structure are important: as one Pakistani analyst noted, "Commonality of platforms might lead to commonality of doctrines and operational plans."⁵⁸ While skeptics might regard such a statement as posturing, it reveals a willingness on the part of at least some Pakistanis to countenance such an advanced partnership. Moreover, the China-Pakistan arrangement appears similar to the way the United States approaches technical interoperability with partners: beginning with standardization and compatibility to facilitate joint activity in future military contingencies. In return for offering advanced technology and generous financing, China might also begin to expect more of Pakistan than it has in the past, potentially in the form of collaboration and geographic access to secure its interests in the Indian Ocean. Certainly China can be confident its Pakistani partners have the enabling conditions for such a collaboration—that is, compatible equipment and networks of communications and information systems—should they seek it.

Military Interactions

In August 2022, Pakistan's then army chief, General Qamar Javed Bajwa, characterized China's and Pakistan's militaries as "brothers in arms" working together to safeguard collective interests.⁵⁹ The volume and quality of military-to-military interactions appear to validate that description and provide additional indicators of the growing military relationship. While the China-Russia partnership draws considerable attention for its "no limits" aspirations and provocative, high-profile bomber and naval drills, the available data suggest that Pakistan may be China's leading military partner in terms of frequency and quality of joint military exercises.⁶⁰

The PLA's military engagement with Pakistan has been one of the most significant relationships it has cultivated over the past two decades. A study published by the US National Defense University based on a unique dataset of China's "military diplomacy" between 2003 and 2016 consisting of military exercises, naval port calls, and senior-level meetings between defense or military officials—found Pakistan to be one of China's most frequent partners, behind only Russia and the United States. While the United States held frequent senior-level meetings with China, Pakistan and Russia held almost the same number of exercises and port calls with the PLA.⁶¹

Data collected since 2016 underscore the evolving picture of China's military diplomacy. While there has been a significant decline in US-China military interactions in the context of heightened military and geopolitical competition, the number of Pakistan's military interactions with China between 2017 and 2021 outpaced the number of China-Russia military engagements, particularly with respect to bilateral military exercises. Figure 3 (see page 15) illustrates the growth of the China-Pakistan military relationship over time and in comparison with the China-Russia military relationship.

The graph validates other accounts of a recent (beginning in 2017) acceleration in China-Pakistan relations. One US study suggests this began in the early 2010s. After a precipitous downturn in US-Pakistan relations in 2011 following the killing of Osama bin Laden and, later in the year, US drone attacks that killed Pakistani civilians, there was a noticeable increase in military interactions between China and Pakistan, including PLA students attending Pakistan's professional military education institutions and Pakistan military students attending China's institutions.⁶² Staff exchanges in professional military education institutions are valuable for building interoperability between forces to smooth out inevitable friction points that arise from different procedures.⁶³

Both nations appear to be formally institutionalizing the military collaboration and senior-level meetings. In June 2022, they exchanged strategic assessments during the well-publicized meeting of the Pakistan-China Joint Military Cooperation Committee, the apex body for facilitating cooperation, led by General Bajwa and the vice-chair of China's Central Military Commission, General Zhang Youxia. Some analysts believe this formal bilateral military dialogue began one to two years earlier but was only recently publicly revealed.⁶⁴

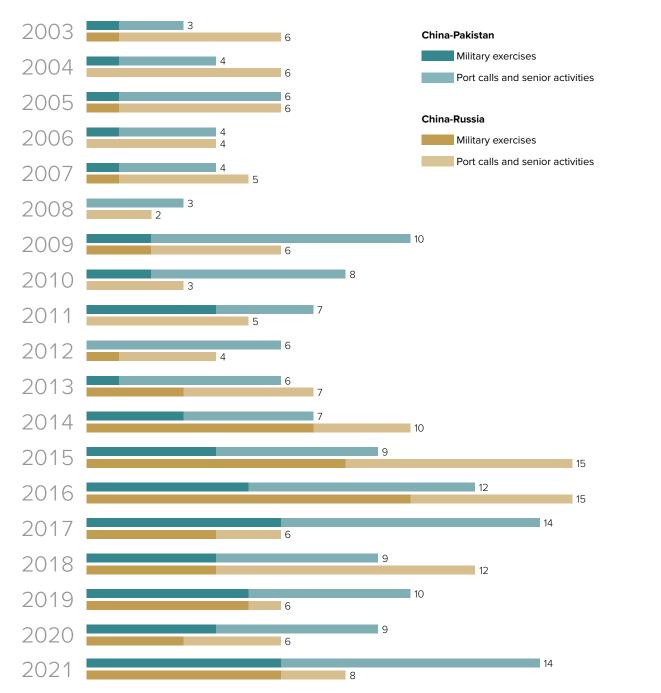
The comparison to Russia on a subset of military interactions provides important insight. In total, China's military diplomacy with Pakistan is second only to its military diplomacy with Russia; but since 2017, Pakistan appears to be outpacing Russia in total military diplomacy interactions and exercises. Although the data is inexact, this uptick is notable in light of Beijing's explicit commitment to a partnership with Moscow. In February 2022, China and Russia signed a joint statement affirming their mutual long-term loyalty. That China's military diplomacy with Pakistan approaches a similar level as its interactions with Russia should leave little question as to the latent capacity of a deepened China-Pakistan relationship.

In addition to the increased frequency of China-Pakistan military engagements, the qualitative aspects of the military exercises suggest increasingly aligned procedures and a potential interdependence that may outstrip what the China-Russia military partnership offers. The reported scale of some China-Russia military exercises and the publicity around them put out by Beijing and Moscow do raise concerns about these countries' military quasi-alliance, but two leading Russia scholars discounted the significance of the touted defense cooperation. They noted that "these exercises are typically conducted in parallel rather than jointly and do not involve tactical or operational coordination to improve the countries' interoperability or joint warfighting skills.... The limited scale and scope of these exercises suggest that their utility beyond geopolitical posturing is limited at best."⁶⁵

By contrast, an analysis of China's and Pakistan's joint "Shaheen" (or Eagle) air force exercises over the past decade reveals growing complexity, interoperability, and trust that might permit joint military operations in the future. A new dataset of public reporting and press releases from Pakistani, Chinese, and other news and analytical sources was assembled for this report and evaluated based on criteria employed by previous studies and consultations with defense experts to assess the complexity and realism of military exercises.

FIGURE 3.

China's military diplomacy with Pakistan and Russia



Sources: China military diplomacy data is based on the original and ongoing dataset created by National Defense University, supplemented by data from the Center for Strategic and International Studies China Power project, Kardon et al., and the author's additional data collection. See Kenneth Allen, Phillip C. Saunders, and John Chen, "Chinese Military Diplomacy, 2003–2016: Trends and Implications," *China Strategic Perspectives* 11, Center for the Study of Chinese Military Affairs and Institute for National Strategic Studies, July 2017; China Power Team, "How is China Bolstering its Military Diplomatic Relations?" China Power, October 27, 2017, updated August 26, 2020; and Isaac B. Kardon, Conor M. Kennedy, and Peter A. Dutton, "Gwadar: China's Potential Strategic Strongpoint in Pakistan," *China Maritime Reports* no. 7, China Maritime Studies Institute, August 2020.

The complexity of a joint exercise offers an important proxy for the actual utility of the military relationship between two countries. Exercises can be considered complex if they include elements such as opposition forces, live fire, nighttime training, electromagnetic countermeasures, complex physical environments (including difficult terrain or weather challenges), unscripted or unknown features, combined-arms with other support elements (for ISR, logistics, or electronic warfare), joint training (with another service), and large formation air battles.⁶⁶ One-on-one interactions between dissimilar aircraft is another important measure of the exercise's complexity. As historian Michael Weaver noted, "Realistic training and tactics validation in aerial combat maneuvering can only be effectively accomplished through unlike fighter engagements." This is the basis of the US military's TOPGUN program, which was initiated in 1969 to improve tactical proficiency and enhance combat effectiveness among navy fighter pilots.⁶⁷

Table 4 (see page 17) shows that the complexity of the annual Shaheen exercises has significantly increased, based on measurement of these features from open-source reports, analysis, and press releases. Although the measures are somewhat general and the measurement is imprecise, the data support anecdotal accounts of the exercises' increasing sophistication.

Over time, the Shaheen exercise series has included larger opposition formations with combined arms, unscripted elements, and complex physical environments. PLA Senior Colonel Du Wenlong said of the August–September 2019 Shaheen VIII exercise:

The biggest feature of the joint training this time is that it's conducted in a back-to-back manner, whereby neither party is informed of the other's situation and has to find it completely depending on the early warning aircraft, predict its operations and immediately change the training plan. The training is more confrontational than previous ones that followed a pre-arranged plan. Besides, all the confrontational exercises are carried out in highly complicated environment simulating plateau or mountainous areas, so the troops have to overcome the impacts caused by natural conditions and disturbing factors. Since it's back-to-back without the communication of any information, the "Shaheen (eagle) VIII" joint training features a keener sense of unfamiliarity and is very close to real-combat environment, with its indicators and plans all reaching the real-combat level.⁶⁸

Separate from the Shaheen air force exercises, the navies of the two countries began a series of advanced bilateral exercises in 2014 and conducted five iterations through 2017, with a growing emphasis on interoperability and even interchangeability.⁶⁹ In 2020, this was elevated to a biennial named naval exercise: "Sea Guardians."⁷⁰ The most recent iteration, held in July 2022 off the coast of Shanghai, included live-fire missile attacks against maritime targets, replenishment, tactical maneuvering, anti-submarine warfare, and air and anti-missile defense, as well as joint support on damaged vessels. Both sides took another step forward in interoperability as the Pakistan Navy got the opportunity "to integrate into the PLA's combat system and receive real-time battlefield information," allowing a PLA Navy early warning aircraft to "provide situational intelligence and targeting data to the Pakistani vessel in the missile attack drill."⁷¹

Much as with the China-Russia relationship, China's increasing and high-quality joint exercises with Pakistan generate manifold benefits. They signal the two countries are not isolated

TABLE 4: INDICATORS OF COMPLEXITY IN JOINT CHINA-PAKISTAN SHAHEEN AIR FORCE EXERCISES

Training element	Shaheen I 2011	Shaheen II 2013	Shaheen III 2014	Shaheen IV 2015	Shaheen V 2016	Shaheen VI 2017	Shaheen VII 2018	Shaheen VIII 2019	Shaheen IX 2020
Combined-arms (with support elements)	1			1		1	1	1	✓
Dissimilar air combat training	1		1	1		1	1	1	1
Complex physical environments		1		1		1	1	✓	
Opposition forces			1	1		1	✓	✓	✓
Electromagnetic countermeasures								✓	1
Joint (with another service)						1		✓	✓
Large formations						1	✓	✓	1
Live-fire elements						1			1
Nighttime flying						1			
Unscripted features								1	

Note: Author's new dataset assembled from public reporting and press releases from Pakistani, Chinese, and other news and analytical sources. Data for the Shaheen V (2016) exercise are unavailable.

but instead have powerful, geopolitically relevant friends. They build meaningful trust, enhance both militaries' tactical and operational proficiencies, and enable China to compensate for the PLA's lack of combat experience by learning from a Pakistan military that has been engaged in intermittent combat conditions for two decades on the country's western border.⁷² For instance, China's air force is newly equipped with more sophisticated and long-range air-to-air missiles, and it may be seeking to learn aerial tactics and operational concepts from the Pakistan Air Force, which has been employing American beyond-visual-range air-to-air missiles for decades.

Finally, high-quality, complex exercises enable both China and Pakistan to build capacity for joint operations. The Pentagon's 2020 report on China's military power noted that the military engagements that China has conducted with Pakistan, Russia, and certain members of the Association of Southeast Asian Nations "can improve the PLA's ability to organize and manage combined operations that integrate foreign forces."⁷³ And China and Pakistan are explicit about this goal: since 2015, soon after an important state visit by Xi Jinping, both countries have been emphasizing in public statements that joint exercises are designed to build interoperability between the two navies and air forces.⁷⁴

In addition to growing matériel and equipment compatibility, the routinization of high-complexity military exercises presages a level of procedural and command interoperability that can generate synergies between the two forces in future missions and operations.⁷⁵ One Pakistani analyst specified that the purpose of growing air force interoperability is to "increase the ability of both the troops to carry out joint operations and strikes smoothly."⁷⁶ According to a naval expert, the PLA Navy's routine visits were intended to "hone interoperability with [Pakistan Navy] in the undersea arena, getting acquainted with the local operating environment, and most likely tracking and conducting mock attack runs . . . especially submarines" in order to eventually "jointly prosecute such missions."⁷⁷ Some assess this may even skew beyond interoperability toward interchangeability.⁷⁸ China and Pakistan approaching a new military relationship threshold may compel their competitors and adversaries to jointly plan for combat on a dual front. This strategic dilemma has been observed by New Delhi, but Washington may also need to consider it in future defense planning.⁷⁹

Basing: Power Projection

Beyond arms sales and exercises, there is the question of how China might leverage its relationship with Pakistan for power projection in the future. Countless reports have speculated about the prospect of a Chinese air and naval base on Pakistan's western coast.⁸⁰ For example, a recent in-depth profile of their military relationship assessed that China could leverage its operation of Gwadar port, a key city of the BRI located in Balochistan Province, near the strategically important Strait of Hormuz, "to expand the naval footprint of its attack submarines." Submarine sales, the analysis predicted, would allow China to "use the equipment it sells to the South Asian country to refuel its own submarines, extending its navy's global reach."⁸¹ Solving China's sustainment challenge in the Indian Ocean—that is, its ability to keep a large fleet of ships permanently "on station"—would allow the PLA Navy to dominate the Indian Ocean.⁸²

The US government and leading analysts also view PLA power projection from Pakistan as a distinct possibility. Pakistan is one of 13 countries named in the Pentagon's most recent report on China's military power as a potential location for additional Chinese military facilities and logistical units to be positioned in support of naval, air, ground, cyber, and space power projection.⁸³ The authors of a recent RAND study judged Pakistan to be one of the four most likely candidates for PLA basing and access among 108 potential countries across the Indo-Pacific assessed for desirability and feasibility.⁸⁴ Retired US Navy rear admiral Michael McDevitt has argued that "Gwadar, Pakistan, is already a 'place' that could become a base," in order to support the PLA Navy's "open seas protection deployments."⁸⁵

Reporting has indicated that China might deploy PLA Navy marine corps units to provide security to overseas ports like Gwadar.⁸⁶ Open-source satellite imagery analysis has detected Chinese complexes in Gwadar with "unusually high security."⁸⁷ While security could easily have been increased in response to the unsafe environs of Balochistan, which has seen a resurgence of insurgency and terrorist attacks, a hardening of the Chinese facilities could alternatively be an indicator of a covert militarized use of the port, akin to China's apparent plans to secretly

militarize its port facilities in the United Arab Emirates (UAE). (Such militarization stopped when the United States became aware of it in 2021 and warned the Emirati government that continuation might threaten US-UAE relations.)⁸⁸

The speculation about a Chinese base has historical roots. In 2011, Pakistan's defense minister asserted that both sides had agreed to establish a Chinese naval base in Pakistan. China officially denied it, but analysts have clarified the nominal difference that China would *seek access* to a naval facility, not establish a formal and exclusively Chinese military base, and that Gwadar would serve as a "logistics support base for supplies and maintenance" for China's navy.⁸⁹

Debate over whether Gwadar meets the formal definition of a military base has at times obscured that it is a critical node in China's unique form of global power projection.⁹⁰ Furthermore, such arguments discount the significance of such a facility already providing support links to China's military and lowering the barriers to China gaining "contingency access" and expanding its foothold into a forward operating location for global military operations.⁹¹

What may appear as limited, contingency access closely overseen by the host nation can quickly evolve into basing. The character of Soviet access during the latter half of the Cold War may be instructive for China's possible approach. At times, the Soviet military may have been directly operating platforms officially transferred to partners, maintaining complete control of partners' facilities that they were ostensibly only accessing, and exploiting partners' limited monitoring capacity to use their geography (e.g. airspace or exclusive economic zones) without consent.⁹²

Some analysts have argued that with the PLA's and the PLA Navy's long-term goal of acquiring overseas bases for naval expeditionary fleets in the Indian Ocean, turning Gwadar port into a PLA Navy foothold is just a matter of time as more PLA Navy staff will inevitably be deployed to train submariners, maintain the port and vessels, perform repairs, and provide logistical support, especially with the planned transfer of eight conventional Type 039 submarines by 2028.⁹³ A recent report by the US Naval War College substantiated a number of US projections, but also cast doubt on the stronger claim that future PLA Navy basing is inevitable. Gwadar, the report writers held, is neither destined nor likely to become a PLA Navy base; rather, it is more likely to have military utility for China in peacetime by providing pier space and facilities for conducting repairs and replenishing fuel and supplies.⁹⁴

There are several reasons why Gwadar has military utility for China. The port is physically suited for basing, with a pier accommodative of even the biggest PLA Navy vessels and an adjacent laydown yard for assembling military equipment and pre-positioning materials and supplies. Indicative of this, Pakistan Navy craft, including Chinese-origin F-22P frigates, are regularly seen visiting the port. As the Pakistan Navy inducts new submarines in addition to surface and coastal combat craft from China, its facilities, parts, and technicians could potentially be tasked to support portions of the PLA Navy fleet.⁹⁵ Gwadar's new airport and runway to be completed in 2023 will also be accommodative of China's strategic airlift fleet.

The conspicuous absence of commercial activity at Gwadar—which has raised the suspicions of expert observers—makes it easier for a naval footprint to increase without economic disruption and with greater concealment from foreign observation.⁹⁶ Gwadar's port manager, the China Overseas Port Holding Company-Pakistan, is also legally required to support PLA

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overseas operations if called upon to do so.⁹⁷ Even though the PLA Navy at present appears to prefer making port calls in Karachi, some Chinese officials boast of Gwadar as a turnkey military facility. As Isaac Kardon and co-authors noted, "One PLA officer said of the PLAN's option for using Gwadar as a base, 'The food is already on the plate; we'll eat it whenever we want to.'"⁹⁸

MOTIVES FOR BASING AT GWADAR FOR THE PLA NAVY

China is clearly developing the capability to turn Gwadar into a naval port, but its purpose remains unclear. What accounts for China's capability developments without discernible intentions? One explanation is that China does not yet know what it wants but is establishing a presence as a form of contingency planning. In many ways, this is similar to the US approach in the Indo-Pacific of building partnerships, creating access, and putting in place logistical arrangements that can be operationalized in high-end contingencies.

China could leverage an Indian Ocean naval facility for a number of missions, ranging from noncombat and counterterrorism operations up to intelligence collection, coercive diplomacy, and even support for conflict operations.⁹⁹ Even in the absence of a definite strategy on China's part, Pakistani strategists have been more forward leaning, suggesting that "the potential for Gwadar to be used in support of future Chinese naval operations is also very real."¹⁰⁰ In several strategic journals published by the Pakistan military, Pakistan military analysts and officers have offered four potential military-strategic rationales for China to transform Gwadar into a PLA Navy military base.

The most commonly cited motive has to do with energy security, that is, as insurance against a blockade of the Strait of Malacca, a crucial shipping route for importing petroleum and liquefied natural gas. Even though overland transit is still highly vulnerable to disruption and is cost-prohibitive, transporting oil overland from Gwadar through China's in the Xinjiang region would secure an alternative route against such contingencies.¹⁰¹ A Pakistani strategist proposed that "Pakistan would give a naval base to China at Gwadar Port to minimize the cost of transportation of oil to China"; another specified that it "can serve as an alternate to the sea route that passes through the Straits of Malacca."¹⁰²

A second motive for developing a PLA Navy base at Gwadar might be to bottle up and constrain the Indian and US navies. As a Pakistani colonel pointed out, "Naval facilities or foothold on the Arabian Sea Coast could provide the Chinese a forward base to monitor U.S. naval activity in the Persian Gulf region and Indian naval activity in the Arabian Sea."¹⁰³ A Pakistani brigadier asserted that a militarized Gwadar would "deny maneuver[ing] space to Indian Navy in Indian Ocean" and "provide the Chinese with a listening post to observe the naval activities of the USA."¹⁰⁴ Confining the Indian Navy to the Western Indian Ocean would limit its ability to threaten China's sea lines of communication or to join a US-led military coalitional effort in the Pacific.

A third potential motive is that a formal base could help sustain China's enhanced naval presence in the Indian Ocean and help "to defeat blockade of her [sea lines of communication] . . . by placing her military assets at these ports."¹⁰⁵ An enhanced attack submarine presence could then be leveraged to threaten US capacity to swing US forces from the Persian Gulf, the Mediterranean, and the island of Diego Garcia in the Chagos Archipelago to the Pacific, particularly in a conflict over Taiwan.¹⁰⁶ The most aggressive motive cited, however, is that PLA Navy basing in Gwadar could serve as a source of power projection to strengthen China's own blockade or maritime interdiction of the Strait of Hormuz as a horizontal escalation response to a US blockade of the Strait of Malacca. Gwadar access, Lieutenant Colonel Asim wrote in Pakistan's Command and Staff College journal, *Citadel*, "would also fulfill China's strategy to generate its effects in [the] Indian Ocean . . . thus countering any future blockade to its energy routes."¹⁰⁷ This would give China leverage not only over the United States but also over US allies, such as oil exporters in the Gulf and heavy oil importers, such as Japan and South Korea.¹⁰⁸

These motives are not mutually exclusive, although each would require distinct supporting elements. For example, transport networks, ISR assets, advanced submarine sustainment facilities, or A2AD capabilities would need to be specific to China's ultimate intentions.

The implications of PLA basing in the Indian Ocean may not simply be a direct threat to US military freedom of action but also indirectly raise costs and challenges to US interests in the region. Great power basing can alter regional balances of power that trigger conflict and draw in outside powers.¹⁰⁹ How PLA basing influences Pakistani behavior—whether toward bolder actions or restraint—and how a neighbor like India reacts can intensify rivalries between region-al nuclear powers and suck the United States into the Indian Ocean and away from the Pacific.

MATERIAL AND POLITICAL OBSTACLES

In light of Gwadar's development into a PLA Navy strategic strongpoint and potential turnkey naval facility, there are few remaining material obstacles to its military use in peacetime. In wartime, however, there would be one very significant material obstacle: Gwadar would be highly vulnerable without hardened facilities, bunkers, coastal and air defenses, specialized parts, ordnance, equipment, and defense personnel.¹¹⁰ Nonetheless, PLA precedent militarizing the Spratly Islands in the disputed South China Sea between 2014 and 2016 proves that these requisites could easily be met if a decision was finalized.¹¹¹ Moreover, many defensive features could plausibly be built under the guise of assisting Pakistan to harden its own facilities and capabilities, just as the US assists its partners with forms of "covert balancing."¹¹²

The more critical obstacle to the use of Gwadar in a wartime scenario, however, is political. Kardon and co-authors judge the peacetime use of a dual-use facility for replenishment to be likely, but its deployment as a military base during a time of conflict time "cannot be assumed" because of the "apparent lack of political commitment between China and Pakistan to provide mutual military support during times of crisis or conflict."¹¹³ Nevertheless, there are reasons to think this forbearance could change.

The fundamental reason why China might be unlikely to pursue basing in Gwadar is that by doing so, China would essentially be entering into an alliance, alienating India and abandoning 30 years of a carefully constructed South Asia strategy, which could catalyze Indian hard balancing.¹¹⁴ However, recent circumstances could compel China to consider unprecedented shifts in strategy. In 2020, a border standoff between Indian and Chinese troops led to the first shots fired on the Line of Actual Control since 1967 and the first combat fatalities since 1975. Another flare-up along the disputed border occurred in December 2022. It is thus plausible that a precipitous deterioration in China-India relations is already under way, that Indian hard balancing is inevitable, and

that China would therefore have nothing to lose in overt militarization of Gwadar. If the Chinese Communist Party believes Indian antagonisms are past the point of no return and that India's alignment with the West is a foregone conclusion, militarizing Gwadar would be a logical response.

The other half of the political equation is Pakistan's willingness to host China's military forces, and here the barriers are even lower. In 2011, as noted earlier, Pakistan actively courted China to build a naval base at Gwadar, and reports suggest Pakistani officials would have been open to China conducting regular ship repair and maintenance on the base.¹¹⁵ Some of Pakistan's strategic elite have asserted that Pakistan's history with foreign military basing by the United States has soured the Pakistan military and general public opinion on the idea, but other unnamed serving officials have suggested China's presence would be welcome in a balancing role.¹¹⁶

Pakistan's public might also support Chinese basing if they believe it offered a form of extended deterrence. Within the limited survey research that has been conducted on the Pakistani public's foreign policy attitudes, a high level of support for China-and curiously high expectations of China's material and military support in particular—remains constant. Public opinion has consistently held that China is Pakistan's most important friend for more than two decades.¹¹⁷ This translates into high expectations of military support from China. In a nationally representative survey conducted in March 2019, soon after the Balakot Crisis with India, 82 percent of Pakistanis expressed confidence in China's support in wartime, with 67 percent expressing confidence in China's "complete support."¹¹⁸ This is consistent with the results of a 2018 survey conducted in Pakistan's largest province, Punjab, which found an overwhelming 74.5 percent of respondents believed it was likely that China would defend Pakistan in the event of an India-Pakistan war.¹⁹

High expectations of Chinese support stem from Pakistan's historical narratives that "China has never abandoned [Pakistan] in the time of trial," particularly in Pakistan's wars with India.¹²⁰ Though these accounts run counter to several external assessments of China abandoning Pakistan, one analyst observed that China effectively gets a special "discount" in Pakistan's strategic debates.¹²¹ If Pakistan operates with such sanguine expectations, it could just as easily conclude that China's wartime basing and a de facto alliance would enhance rather than jeopardize national security.

The Future of the China-Pakistan Military Relationship

The US has long counted on its alliances as the trump card in great power competition. The Biden administration's February 2022 Indo-Pacific Strategy characterized the United States' "network of security alliances and partnerships" as the country's "single greatest asymmetric strength," even though non-treaty partners are not bound by any formal obligations.¹²² Both Senator Jack Reed and Admiral James Stavridis have characterized the United States' network of allies, partners, and friends as its "greatest comparative advantage over China.¹²³ By contrast, US officials discount the quality and reliability of China's partnerships. Senator Todd Young has observed, "China has no friends; they have vassal states."¹²⁴ These assumptions may require updating as the balance of friends with power evolves and China's quiet investments in the region, including its military partnership with Pakistan, deepen.

In 2015, some analysts forecast a decline in the China-Pakistan military relationship, citing such obstacles as China's aversion to alliances, cultural impediments, and diminished demand on both sides.¹²⁵ That same year, however, Xi Jinping made a state visit to Pakistan (mentioned earlier), during which he introduced the CPEC as a "flagship" project of the BRI and announced the sale of eight submarines to Pakistan, providing an inflection point for a dramatically augmented quasi-alliance.

Now, in less than a decade, the China-Pakistan military relationship has arguably advanced from an episodic partnership to a threshold alliance. The Pakistan military's major defense equipment is increasingly sourced from China, especially the higher-end combat strike and power projection capabilities; and Pakistan continues to retire older US- and European-origin platforms. Beijing's and Islamabad's militaries, particularly their air forces and navies, are growing more comfortable operating together, potentially in preparation for future missions. And some variant of PLA Navy basing on Pakistan's western coast in peacetime may be only a matter of time and could pave the way for basing or co-location of forces. In some ways, advances in the China-Pakistan military relationship may be outpacing what the United States aspires to in many of its non-allied partnerships in the Indo-Pacific, including those with Vietnam, Indonesia, and India and even some of its treaty allies such as Thailand and the Philippines.

What evidence might suggest crossing the threshold to become an alliance? One indicator would be Beijing granting Pakistan more military aid and access to sensitive systems such as the J-20 stealth fighter or nuclear-powered attack submarines. The militaries adopting a joint peace-time mission, for instance, a standing counter-piracy mission or a joint intelligence mission monitoring the North Arabian Sea or the Afghanistan-Pakistan-China border, could be another. A third indicator would be mutual support—whether in the form of intelligence, munitions, sustainment, or military movement—to back each other in the event of a China-India or Pakistan-India border crisis. A final signal might be PLA Navy deployment of maritime reconnaissance assets in Gwadar or a growing personnel footprint sufficient not only to sustain Pakistan's Chinese-origin submarines and ships but also to regularly supply and sustain PLA Navy ships so that they could remain "on station" in the Indian Ocean for longer periods of time. Because these capabilities are built incrementally, there may be no obvious indicators until the reality of the alliance is revealed in a crisis.

Both civilian and military leaders have explicitly denied that Pakistan is drifting into Beijing's camp and have eschewed pressures forcing them to choose between relations with China and the West, but they may not appreciate how China's growing leverage will circumscribe their strategic autonomy.¹²⁶ Increasing influence on Pakistan's military and enabling technology may change incentive structures and constrain choices over time. After the CPEC launch, Pakistan similarly declared it was not privileging economic relations with China over others; but the government failed to appreciate that the CPEC terms were locking out Western investors.

On the other hand, despite evidence that the China-Pakistan military relationship meets the criteria of a threshold alliance, completing the trajectory toward a full alliance is not inevitable. Unlike a threshold nuclear weapons state, from which the scientific and engineering knowledge necessary for developing a nuclear weapon cannot be expunged, a threshold alliance

is potentially reversible. Arms can be diversified (though over decades), exercise tempo and complexity can diminish, and the use of military facilities can be restricted by law. In China's and Pakistan's current political and security environment, there are several points of friction that could slow or reverse the current trajectory of their military relationship.

Politically, China's treatment of the Uyghurs, a Turkic Muslim ethnic minority, in Xinjiang Province could hinder its relations with Pakistan. Although China's government has strived to censor its mass labor camps and other human rights infringements, these could still prompt public dissent among Pakistani politicians, citizens, and religious leaders. The nations' relationship would be further stressed if jihadist groups operating from inside Pakistan targeted China.¹²⁷ Economically, an imbalance in trade and unmet investment expectations could also create friction should Pakistan continue to face climate disasters, economic crises, and anemic growth. These tensions would be exacerbated if Pakistan began to lose access to Western export markets or financial institutions because of its relationship with China. Tensions could also rise if China were to grow weary of injecting cash into Pakistan's economy or actively started pursuing economic and military investment in Iran at Pakistan's expense.

Other fissures could be more of the military-strategic variety. Although it is difficult to assess Pakistani appraisals of Chinese military equipment, trust would erode if the military became frustrated with the weapons on offer and with China withholding more advanced technology. Finally, Pakistan might start to reconsider its risk exposure if it began worrying about entrapment and became concerned that increased security interdependence with China circumscribed its autonomy, harmed national security, or constrained access to global institutions or markets, especially in the event of Chinese military aggression in East Asia. If Pakistan is determined to avoid being entrapped in a particular camp, it might seek to position itself more as Yugoslavia or even India did during the Cold War, preserving some distance and independence, rather than adopting the posture of a treaty-allied Warsaw Pact state.¹²⁸ Chinese scholars closely affiliated with the state have issued subtle warnings, however, that China's close partners cannot remain neutral in the event of future great power conflict.¹²⁹

In short, while the current status of the China-Pakistan relationship meets the conditions of a threshold alliance, a full-fledged future alliance may not be consummated, potentially due to China's own missteps, or due to opponents' active measures to arrest the relationship. Since China has expended considerable energy trying to undermine or decouple US alliances, it stands to reason opponents of China's rise might also seek to disrupt Beijing's search for allies.

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