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THE TIMES OF INDIA

Thu, 28 Dec 2023

India can become Self-Sufficient in Defence Sector: Former DRDO Chairman

India last year exported indigenous defence equipment worth Rs 16,000 crore to the world, becoming a major exporter from once being one of the biggest importers, former DRDO chairman G Sathesh Reddy said on Wednesday, adding he was confident that this year's exports would surpass that of the past, reports Hemali Chhappia. Speaking at the 27th edition of annual Techfest at the Indian Institute of Technology-Bombay, he said India has taken some giant leaps in the defence sector, but there is scope to become "self-sufficient".

"Previously, only public sector units were engaged in the defence sector. But, now, several MSMEs have entered this space. If one looks at tier 1 and tier 2 cities, there are about 2,000 companies and many start-ups with the mindset of being globally competitive," he said.

Over 400 academic institutes were currently working with defence organisations on various projects with a "never seen before" budget of Rs 1,150 crore, Reddy added.

<https://timesofindia.indiatimes.com/city/mumbai/india-can-become-self-sufficient-in-defence-sector/articleshow/106334636.cms>



**Press Information Bureau
Government of India**

Ministry of Defence

Wed, 27 Dec 2023

Raksha Mantri visits border areas of J&K; Reviews security situation along LoC

Calls for professional conduct & due diligence while carrying out operations

Remain extra vigilant; There should be zero tolerance to terror: Shri Rajnath Singh to troops

“Soldiers’ duty is to safeguard national interests & win people’s hearts”

Raksha Mantri Shri Rajnath Singh visited the border areas of Jammu & Kashmir and took stock of the security situation along the Line of Control (LoC) on December 27, 2023. He carried out a first-hand assessment of the prevailing situation as well as the counter-terror operations in the area. He was accompanied by Chief of the Army Staff General Manoj Pande and General Officer Commanding-in-Chief, Northern Command Lt Gen Upendra Dwivedi.

The Raksha Mantri was given a detailed brief on the prevalent security situation, counter-infiltration grid and operational preparedness. The aspects associated with the operating challenges were discussed by Shri Rajnath Singh with the Commanders on ground. He called for professional conduct and due diligence while carrying out operations.

Interacting with the troops, the Raksha Mantri paid tributes to the soldiers killed in action and conveyed his deepest condolences to the families of the bravehearts. He wished a speedy recovery of the injured soldiers, emphasising that all necessary measures are being taken in view of the prevailing situation.

Shri Rajnath Singh assured the troops that the Government stands with the Armed Forces and the nation will forever be indebted to the unparalleled valour and sacrifice of the soldiers. He termed the welfare of the Armed Forces as the Government’s top priority, stressing that additional efforts are being made to bolster the security and intelligence framework.

“Indian Army is not an ordinary army. The soldiers are our protectors. It is their duty to not only safeguard national interests, but also to win the hearts of the people,” the Raksha Mantri added. He

exhorted the troops to remain extra vigilant, so that no untoward incident occurs in future, reiterating that there should be zero tolerance to terrorism.

The Raksha Mantri described the recent incidents in the sector as unfortunate and asked all ranks to undertake operations based on hard intelligence, in accordance with established procedures aided by niche technology. He urged all Commanders to have zero tolerance for violations of the well-established SOPs.

Shri Rajnath Singh also met with the families of the deceased persons, residents of village Topa Peer of Bufliaz in Poonch district. He assured expeditious investigation into the incident culminating into deliverance of justice.

The Raksha Mantri expressed satisfaction for the high level of synergy between the security forces, civil administration, J&K Police, Central Armed Police Forces and other security agencies in projecting a clear message of resoluteness towards improving of the security environment, that is conducive to fostering a new era of development in the Union Territory (UT).

He also complimented the local people for their steadfastness and contribution towards joining the mainstream efforts undertaken by the Government of India. It was emphasised that the unity in thought process, alignment and collective resolve for the good of the nation is the most important foundation for achievement of shared aspirations of peace & development in the UT.

Preceding the visit of the Raksha Mantri, the Chief of Army Staff had visited the area on December 25, 2023 and exhorted all ranks of the Indian Army to conduct operations in the most professional manner while remaining resolute and steadfast against all challenges. He had also underscored the commitment of the Indian Army to respecting human rights and zero tolerance for violations in any form.

<https://pib.gov.in/PressReleasePage.aspx?PRID=1990826>



Thu, 28 Dec 2023

India, Russia aim to Bolster Ties in Energy, Military-Tech

India and Russia on Wednesday agreed to explore ways to expand the export of Russian energy, including oil and coal, to Indian markets as external affairs minister S Jaishankar and his counterpart Sergey Lavrov charted a course for future cooperation between the two countries.

Jaishankar, who is on a five-day visit to Russia, met Lavrov for a sweeping review of bilateral relations, including cooperation in energy and military-tech, following his talks on Tuesday with deputy prime minister Denis Manturov that largely focused on trade and investment.

Despite pressure from the US and its European partners following Russia's invasion of Ukraine in February 2022, India ramped up purchases of Russian energy and other commodities such as ferti-

lisers. The Indian side has consistently called for the end of hostilities in Ukraine but has refrained from publicly criticising Russia's actions.

Following his talks with Jaishankar, Lavrov described energy cooperation as a "strategic area" of the overall relationship that Russia intends to strengthen. He told a joint news conference: "We agreed on the expansion of the exports of Russian hydrocarbons to the Indian market as well as the cooperation in the peaceful use of nuclear energy."

Jaishankar described Russian supplies of energy, coking coal and fertilisers as "very big components" of bilateral trade and said the two sides talked about long-term arrangements for these commodities. "How do we reach long-term arrangements in that regard was a big part of our discussion," he said.

India has a "very substantial" energy relationship with Russia in terms of investments in Russian oil and gas, "which we are seeking to expand", Jaishankar said. The two sides are also looking to expand cooperation in nuclear energy. "Yesterday [Tuesday], we signed two important amendments which will take the Kudankulam nuclear power project forward," he added.

On Tuesday, India and Russia signed agreements to move forward with future units of the Kudankulam nuclear power project in Tamil Nadu, which will have six reactors with a capacity of 1,000 MW each. The first two reactors became operational in 2014 and 2016 and work is underway on two more. Both sides haven't offered details of the agreements though people familiar with the matter said on condition of anonymity that they are related to the fifth and sixth reactors, construction of which began in 2021. Despite India's agreements with the US and France on civil nuclear cooperation, Russia is currently the only country building atomic reactors in India. Lavrov described Russia's involvement in this sphere as "our practical contribution to India's activities and work to satisfy its national needs for clean and safe energy".

The two sides also discussed prospects for cooperation in piloted space programmes, rocket engines, satellite navigation systems and military hardware. Lavrov said Russia is "respectful" of India's aspiration to diversify its "military and technical links" and is ready to support efforts to produce military equipment under the "Make in India" initiative.

More than 60% of the equipment and weapons systems used by India's armed forces continue to be of Russian origin, though New Delhi has stepped up efforts in recent years to acquire more Western platforms such as submarines, long-range transport aircraft, and helicopters. The Ukraine conflict and the situation in Gaza, Afghanistan and the Indo-Pacific also figured in the meeting between Jaishankar and Lavrov. India's position on the issue of Ukraine reflects its "responsible approach towards regional and global issues" based primarily on national interests and the interests of fair international cooperation, Lavrov said.

India and Russia have a shared interest in Eurasia and surrounding waters to seek solutions that "would not provoke any confrontational approaches which are sometimes brought to the region from the outside", Lavrov said. The two sides further discussed ways to bolster trade and connectivity, including the International North-South Transport Corridor (INSTC), establishing the Chennai-Vladivostok sea route, and cooperation in exploring the northern polar sea route. They also talked about cooperation in Russia's Far East and at multilateral forums such as the United Nations, Shanghai Cooperation Organisation (SCO) and the Brazil-Russia-India-China-South Africa

(Brics) grouping. The Russian side reiterated its support for India's permanent membership of a reformed UN Security Council.

Responding to a question on the Western perception that India's relationship with Russia is a handicap, Jaishankar said Moscow is a very valued and time-tested partner for New Delhi. "It's a relationship from which both India and Russia have benefited enormously. My presence here today and...all the developments I have pointed out, including our growing trade, investments, military-technical cooperation and connectivity projects, I think all of this will give you a good sense of really the importance and the value that we attach to the relationship," he said.

Lavrov, in his opening remarks, said: "Our cooperation is of a strategic nature, strengthening it corresponds to the national interests of our states [and] the interests of maintaining security in the Eurasian continent." Jaishankar's visit assumed greater significance as India and Russia could not hold their annual leaders' summit for the second consecutive year. Responding to a question on this issue, Jaishankar said this year's annual meetings could not be held because of India's G20 presidency and "certain preoccupations". He added, "But I'm very confident that we will see an annual summit next year."

The external affairs minister also reiterated India's concerns about the imbalance in trade with Russia, which rose to \$50 billion in 2022 and is expected to grow further this year because of New Delhi's purchases of Russian energy. "Today, we appreciated the fact that our trade is at an all-time high. We crossed \$50 billion turnover last year. We expect to exceed that this year and what is important is that this trade is more balanced, sustainable and provides for fair market access," he said.

<https://www.hindustantimes.com/india-news/india-russia-aim-to-bolster-ties-in-energy-militarytech-101703700902499.html>



Thu, 28 Dec 2023

Indian Navy presses 5 Destroyers for Securing Arabian Sea; full details of ships

The Indian Navy has now deployed five frontline guided missile destroyers along with logistics tanker, Boeing P 8 I anti-submarine warfare aircraft and long endurance Sea Guardian drone to keep the sea lanes of communication between Bab el-Mandeb to Indian coast safe for merchant shipping and missile attack by Iranian proxies in the Middle-East.

It is understood that the Indian Navy has deployed INS Kolkata, INS Kochi, INS Mormugao, INS Chennai and INS Visakhapatnam into the Arabian theatre independent of the US led coalition in the Middle-East region. While INS Kolkata is on the mouth of Red Sea, INS Kochi is south of Yemen Socotra Island, INS Mormugao is in west Arabian sea with Chennai in Central Arabian sea.

INS Visakhapatnam was tasked to patrol the north Arabian sea and left the Indian coast two days ago after an Iranian loitering ammunition Shahed 136 hit chemical tanker MV Chem Pluto 210 nautical miles off Dwarka in Gujarat.

The five top of the line destroyers are being fueled by M V Swarnamala, a 25000 ton oil tanker, currently hired by the Indian Navy. The civilian tanker has a massive fuel and lubricant capacity as compared to the Indian Navy's tankers.

While the Indian ships are dominating the Arabian Sea to prevent black shipping, piracy and deter missile attacks on commercial shipping by Iranian's axis of resistance militia and terrorist groups, Boeing P 8 I multi-mission aircraft along with long endurance Sea Guardian drone are constantly surveying the vessels in Arabian Sea and up to Gulf of Aden to identify suspicious ships and dhows used for targeting the commercial shipping by the Shia Houthis in Yemen, Shia Kaitab Hezbollah in Iraq and by Tehran. The Iranian proxies, particularly the Houthis, are targeting vessels in the Red Sea and Arabian Sea against Israel's war against Sunni Hamas terrorist group in Gaza. Iran backed Shia Hezbollah group has also opened a front with Israel on its northern border.

While the US led coalition is deterring the Iranian proxies from attacking commercial shipping in the Red Sea, the Indian effort is to help secure the Arabian Sea from any missile attacks on commercial shipping routes emanating from the Red Sea and the Persian Gulf with trillion dollar worth of merchant and oil trade at risk from Iranian militia.

To add to the Indian Navy effort, the Coast Guard is also patrolling the EEZ on western coast with offshore patrol vessels and Dornier surveillance aircraft to ensure that there is no suspicious activity on the Indian coast line and Arabian Sea.

<https://www.hindustantimes.com/india-news/indian-navy-presses-5-destroyers-for-securing-arabian-sea-101703735512911.html>



Thu, 28 Dec 2023

Indian Army to get new Quick Reaction Force Vehicles soon

In a major boost to the Aatmanirbharta initiative in the defence sector and enhancing the force's operational capabilities, the Pune-based Tata Advanced Systems (TASL) facility will be delivering the Quick Reaction Force Vehicles (QRFV) to the Indian Army, soon. In a post on X (formerly Twitter), the TASL said that the Indian Army had reordered after having performed well at high altitude. "The QRFV is ready for dispatch to the Indian Army from the Tata Advanced Systems (TASL) facility in Pune."

"Tata QRFVs are successfully operating in difficult terrains and based on the performance and capabilities of these vehicles, the Indian Army had placed a reorder with TASL for a larger quantity to be supplied, and now, a substantial fleet of these vehicles is set for delivery," the company said.

The company did not reveal the number but the sources said: "There would be 80 units to be delivered to the force."

The induction of these vehicles would enhance the operational capabilities of the force amidst the ongoing standoff with China's People's Liberation Army along the Line of Actual Control in eastern Ladakh. In 2022, the then Indian Army chief, Gen Manoj Naravane (R) inducted the vehicles into the force at Pune.

What is a QRFV?

The Quick Reaction Force Vehicle is an armoured personnel carrier with mine protection and comes in a 4x4 configuration. The QRFV can also be used as an escort protection vehicle. It should be noted that these vehicles are also in service in various peacekeeping missions around the world. The vehicles facilitate quick deployment of troops and will enable much faster reaction.

These are tailor-made vehicles with high mobility, enhanced firepower and protection. It will facilitate in creating moral ascendancy in the Northern Borders.

<https://newsable.asianetnews.com/india/indian-army-to-get-new-quick-reaction-force-vehicles-soon-s6cv18>

The Tribune

Thu, 28 Dec 2023

Why Defence Production is yet to achieve its Real Potential

- Bhartendu Kumar Singh

Dependence on imported weapons has always been a public policy concern in India since they adversely affect precious foreign exchange reserves. However, there are good tidings for India's domestic Military-Industrial Complex (MIC). One indication came early this year when the MIC's turnover crossed Rs 1 trillion. Now, a fact sheet released recently by Swedish think-tank Stockholm International Peace Research Institute (SIPRI) speaks about the robust growth of some Indian weapon production companies. These indicators, amidst a sluggish global growth, vindicate the public policy initiatives for the expansion and consolidation of the domestic MIC and self-reliance in weapon production.

As per the fact sheet, titled 'The SIPRI top 100 arms-producing and military services companies, 2022', the revenue of the top 100 arms-producing and military services companies totalled \$597 billion last year, a decrease of 3.5% in real terms compared to 2021. While this decrease is partly attributed to many Russian companies not reporting their revenues in 2022, a significant proportion of the decrease is also attributed to US companies doing miserably last year. The total arms revenue of 42 top 100 companies headquartered in the US fell by 7.9% to \$302 billion in 2022. Apart from the US and Russia, the countries whose MICs have been in a torpid mode are the UK, France, Italy, Spain, Japan, South Korea and Singapore.

India is one of the few countries to have bucked the trend. There were three Indian companies in the top 100 in 2022 — one more than in 2021. Their aggregate arms revenue went up by 7.4% to \$6.4 billion. With a 28% revenue increase — due to the delivery of warships and submarines to the Indian Navy — Mazagon Dock Shipbuilders (ranked 89th) entered the top 100 for the first time. SIPRI's statistical presentations sound sweeter as India's arch-rival China registered a revenue growth of only 2.7% for its arms companies.

Besides the SIPRI fact sheet, the defence production data available on the dashboard maintained by Department of Defence Production also provide some positive insights about the quantum jump in defence production. The production has gone up by more than 30% from Rs 74,000 crore in 2016-17 to more than Rs 1,00,000 crore in 2022-23. The trends so far indicate that the target of Rs 1,35,000 crore for the current year seems realistic.

Credit should go to the established defence PSUs whose turnover has gone up by more than 50% during the same period. They form the major constituent of the domestic MIC. After the corporatisation of ordnance factories as new defence PSUs, the collective share of the PSUs in defence production has gone up to 75%. Concurrently, defence procurements from domestic sources have gone up to 75% and defence exports touched almost Rs 16,000 crore in the last fiscal.

Yet, the production upsurge should not become a cause for complacency since India has a huge ground to cover at the global level. For instance, India has only three companies on the SIPRI list of the top 100 arms-producing companies. India accounts for only 0.2% of the global arms exports. We may be exporting arms to about 85 countries, but they are mostly small and ancillary weapons. Most importantly, India perpetually remains either the first or second largest weapon importer on the SIPRI list of arms-importing countries, accounting for almost 11% of the global arms imports.

Together, these statistical revelations dilute the charm offensive around the recent turnaround in domestic weapons production.

Several factors explain why the domestic defence production is yet to achieve its real potential.

First, the ordnance factories, despite corporatisation and numerous other public policy reach-outs, are not able to usher in a substantial take-off. From 2016-17 to 2022-23, the annual turnover of ordnance factories increased from Rs 14,825 crore to Rs 16,998 crore, an increase of a mere 14.66%. Perhaps, it would take a couple of years more before they get metamorphosed into corporate businesses and expand their turnover as well as profit.

Second, the private sector has also been loath in taking advantage of numerous policy initiatives to reform the defence sector and ensure a level playing field for themselves vis-à-vis the defence PSUs that had a monopolistic domination of the country's MIC until recently. During the same period, the turnover of the private sector has gone up from Rs 14,104 crore to merely Rs 19,925 crore. Though this is a healthy increase of 41.27%, it does not do justice to the huge policy investments in the defence sector. The contribution of the private sector in the total turnover is only 18.65%.

Third, there is a healthy progress in the two defence industrial corridors (DICs). While the one based in Uttar Pradesh has managed an investment of Rs 2,656 crore so far, the Tamil Nadu-based DIC has garnered Rs 4,085 crore; the target for each DIC is Rs 10,000 crore by 2024. The DIC-based experiment seems to be fruitful, as is evident from the substantial investments, numerous

proposed joint ventures and specialisation-based production plans. Unfortunately, these are the only two stand-alone examples and, therefore, do not do justice to the actual potential of the expansion and consolidation of the domestic MIC.

National security imperatives demand that we become self-sufficient in weapon production to reduce our dependence on foreign arms suppliers and the consequential supply-chain and technology-related vulnerabilities.

However, this is possible only if India's domestic MIC proliferates and matures sooner than later. The growth trends so far are largely a consequence of public policy initiatives rather than of a proactive initiative from the MIC constituents. Therefore, while the observations of the SIPRI fact sheet are encouraging, there is a long way for India to go.

<https://www.tribuneindia.com/news/comment/why-defence-production-is-yet-to-achieve-its-real-potential-575923>

Science & Technology News



Press Information Bureau
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Ministry of Science and Technology

Wed, 27 Dec 2023

Om Banana Craft Pvt Ltd. receives ₹18.08 Lakh funding from TDB-DST for Innovative Banana Fibre Extraction Project

Revolutionizing Banana Waste: Om Banana Craft's Modernized Equipment Development for Sustainable fibre Extraction

Empowering Agriculture: TDB-DST Backs Om Banana Craft's Innovative Banana Fibre Extraction Project with ₹18.08 Lakh Funding

In a strategic move towards fostering grassroots innovation and sustainable agricultural practices, the Technology Development Board (TDB) extends financial support of ₹18.08 lakh to M/s Om Banana Craft Private Limited, Madurai for their innovative project, "Modernized Equipment Development for Banana Fibre Extraction & Value Addition."

Banana plants, revered for their versatility, generate outer sheaths that often go to waste. Recognizing the untapped potential in banana waste, Mr. Murugesan, a visionary farmer-entrepreneur and the driving force behind Om Banana Craft, developed a mechanized process for banana fibre extraction and rope-making. This innovation not only streamlines the laborious process but also significantly increases production, contributing to a sustainable and eco-friendly initiative.

Om Banana Craft's founder's ingenious approach as a grassroots and farmer-innovator tackles the challenges faced by farmers, presenting a mechanized solution to the issue of banana waste. The patented "Banana Fibre Processing Machine & its operation method" stands as a testament to the commitment to easing the labour-intensive process, simultaneously enhancing rope production and deriving additional products from banana sheaths.

By utilizing banana ropes, women in local communities skilfully craft products such as mats, bags, and lampshades, contributing to both domestic markets and international exports. This transformative initiative not only provides economic opportunities for these women but also allows them to engage in handcraft work while fulfilling their family responsibilities.

The sustainable practice of procuring banana pseudo stems directly from local farmers extends beyond economic benefits. This approach actively addresses environmental concerns linked to the disposal of banana plant waste, creating a harmonious balance between economic viability and ecological responsibility.

Sh. Rajesh Kumar Pathak, Secretary, TDB, expressed the board's commitment to support innovative projects that promote sustainable farming practices and rural development. He remarked, "M/s Om Banana Craft Pvt Ltd., through its forward-thinking approach, showcases how agro-waste can be transformed into valuable products, contributing to a greener and economically vibrant future." "TDB remains dedicated to backing initiatives that not only drive technological advancements but also positively impact the lives of farmers and rural communities, aligning with the government's vision of empowering the agricultural sector, he added".

<https://pib.gov.in/PressReleasePage.aspx?PRID=1990841>



Thu, 28 Dec 2023

Jio working with IIT-B to launch 'Bharat GPT'

Reliance Jio Infocomm, the largest telecom service provider in India, is working with the Indian Institute of Technology-Bombay to launch 'Bharat GPT', a large-language model tailored for India's needs, said chairman Akash Ambani while addressing a gathering at the IIT's annual Techfest in Mumbai.

"We have been working on a project with IIT Bombay to launch the Bharat GPT programme," he said.

Jio is looking to introduce AI at its enterprise and across sectors within the group. The next decade will be defined by large-language models and generative AI, he said. "We are working very hard to launch AI not only as a vertical inside our organization, but horizontally across all our sectors."

The firm will launch products and services in the media space, commerce, communication and devices, Ambani said. AI is going to "consume everything, to me, AI stands for artificial intelligence, and also stands for all included".

The telco, a unit of Reliance Industries, is “comprehensively thinking” to launch an operating system for television, he said. “We have been working on our own OS (operating system) for a while now for TVs and we are comprehensively thinking about how to launch it.”

Ambani said work on vision of “Jio 2.0” was on, but did not elaborate further. Jio is very excited about offering 5G private networks, and will be offering a 5G stack to all enterprise irrespective of its size, Ambani said.

<https://www.livemint.com/companies/news/breaking-news-l-t-bags-order-in-the-range-of-2-500-5000-crore-l-t-share-in-red-at-rs-353180-11703739591556.html>



Thu, 28 Dec 2023

ISRO to welcome 2024 with India’s first X-Ray Polarimeter Satellite launch on Jan 1

ISRO’s XPoSat mission will help understand emission mechanisms of various astronomical sources like black holes, neutron stars.

Building on the momentum of 2023, Indian Space Research Organisation or ISRO is set to start 2024 with a bang. India is set to launch its first X-Ray Polarimeter Satellite on January 1.

This handout photo taken and released by Indian Space Research Organisation (ISRO) on October 21, 2023, shows the lift-off of the Gaganyaan Test Vehicle (TV) from the Satish Dhawan Space Centre in Sriharikota, an island off the coast of southern Andhra Pradesh state. (AFP)

The XPoSat mission will lift off at 9:10 am using a Polar Satellite Launch Vehicle (PSLV), the space agency announced.

What is ISRO’s XPoSat?

While there are already existing space-based observatories which offer valuable spectroscopic and timing data, figuring out exactly what kind of light comes from these celestial bodies out there is still really tricky for astronomers.

India's XPoSat mission in its 5 years of life will measure orientation of vibration in the light wave which will help understand radiation mechanism and geometry of celestial sources.

The mission “capturing the degree and angle of polarisation, would add two crucial dimensions to our comprehension”, ISRO said.

<https://www.hindustantimes.com/technology/isro-to-welcome-2024-with-india-s-first-x-ray-polarimeter-satellite-launch-on-jan-1-101703740216855.html>

The New York Times

Wed, 27 Dec 2023

Chinese Spy Agency Rising to Challenge the C.I.A., with A.I. help

The Chinese spies wanted more. In meetings during the pandemic with Chinese technology contractors, they complained that surveillance cameras tracking foreign diplomats, military officers and intelligence operatives in Beijing's embassy district fell short of their needs.

The spies asked for an artificial intelligence program that would create instant dossiers on every person of interest in the area and analyze their behavior patterns. They proposed feeding the A.I. program information from databases and scores of cameras that would include car license plates, cellphone data, contacts and more.

The A.I.-generated profiles would allow the Chinese spies to select targets and pinpoint their networks and vulnerabilities, according to internal meeting memos obtained by The New York Times.

The spies' interest in the technology, disclosed here for the first time, reveals some of the vast ambitions of the Ministry of State Security, China's main intelligence agency. In recent years, it has built itself up through wider recruitment, including of American citizens. The agency has also sharpened itself through better training, a bigger budget and the use of advanced technologies to try to fulfill the goal of Xi Jinping, China's leader, for the nation to rival the United States as the world's pre-eminent economic and military power.

The Chinese agency, known as the M.S.S., once rife with agents whose main source of information was gossip at embassy dinner parties, is now going toe-to-toe with the Central Intelligence Agency in collection and subterfuge around the world.

Today the Chinese agents in Beijing have what they asked for: an A.I. system that tracks American spies and others, said U.S. officials and a person with knowledge of the transaction, who shared the information on the condition that The Times not disclose the names of the contracting firms involved. At the same time, as spending on China at the C.I.A. has doubled since the start of the Biden administration, the United States has sharply stepped up its spying on Chinese companies and their technological advances.

This article is based on interviews with more than two dozen current and former American officials, most of whom spoke on condition of anonymity, and a review of internal Chinese corporate documents and public M.S.S. documents.

The competition between the American and Chinese spy agencies harks back to the K.G.B.-versus-C.I.A. rivalry of the Cold War. In that era, the Soviets built an agency that could pilfer America's most closely held secrets and run covert operations while also producing formidable political leaders, including Vladimir V. Putin, the president of Russia.

But there is a notable difference. Because of China's economic boom and industrial policies, the M.S.S. is able to use emerging technologies like A.I. to challenge American spymasters in a way the Soviets could not. And those technologies are top prizes in espionage efforts by China and the United States.

“For China in particular, exploiting the existing technology or trade secrets of others has become a popular shortcut encouraged by the government,” said Yun Sun, director of the China program at the Stimson Center, a Washington-based research institute. “The urgency and intensity of technological espionage have increased significantly.”

<https://www.nytimes.com/2023/12/27/us/politics/china-cia-spy-mss.html#:~:text=The%20ambitious%20Ministry%20of%20State,pilfer%20each%20other's%20scientific%20secrets.>

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