ASTROS

PROCAD DEFESA

BOLETIM ASTROS

Apoio:

CAPES

MINISTÉRIO DA DEFESA

BOLETIM ASTROS

A Newsletter da Equipe Procad ASTROS

O Boletim Astros é uma publicação mensal que reúne informações sobre as (I) Novidades do Projeto, (II) Indicações do Mês, (III) Segurança Internacional, (IV) Tecnologia, Mísseis & Sistemas de Defesa, (V) Defesa Nacional & Forças Armadas e (VI) ASTROS & Indústria de Defesa. Elaborado pela equipe de pesquisadores do Projeto Procad Defesa ASTROS, o boletim oferece um panorama geral de notícias e artigos publicados em portais especializados, revistas, jornais, *magazines*, periódicos, *sites* institucionais e *think tanks* com foco nas temáticas mencionadas.

Equipe editorial

NOVIDADES DO PROJETO

Últimas atividades – Projeto Procad Defesa ASTROS

Entrevista do Dr. Érico Duarte sobre a Guerra das Malvinas

O Prof. Dr. Érico Duarte participou de entrevista para a "Estação História", podcast da Radioweb. O episódio discorre sobre a Guerra das Malvinas e os 35 anos do "troco argentino". A entrevista pode ser acessada pelo seguinte link: https://open.spotify.com/episode/7pFrio6bakXWnoO5Msh45R

Participação do Dr. Carlos Valle no programa "Diálogos na USP"

O episódio "A disputa geopolítica no Espaço" do programa "Diálogos na USP" teve a presença do Dr. Carlos Valle. O evento buscou explorar o lado geopolítico do ambiente geoespacial, e está disponível no seguinte link: www.youtube.com/watch?v=WCPig3kPOWk&ab_channel=CanalUSP

Lançamento de livro do Eduardo Pereira

Será lançado, no dia 2 de julho, o livro "Diplomacia de Defesa", escrito por Eduardo de Souza Pereira. O livro, abordando o evento da penetração do submarino "Tamoio", discorre sobre como o uso de ferramentas do poder militar repercute na arena internacional e contribui para a defesa da Nação.
O evento será transmitido pelo canal do Instituto de Estudos Estratégicos no seguinte link: https://www.youtube.com/c/InstitutodeEstudosEstratégicosUFF

Participação da Dra. Tamiris Pereira no evento "Efetividade Militar das Forças Armadas"

A Dra. Tamiris Pereira participará, no dia 8 de julho, de evento do GEESI (Grupo de Pesquisa em Estudos Estratégicos e Segurança Internacional). O evento contará com a mediação do Prof. Dr. Augusto Teixeira, Débora Guedes e Isabela Santana e pode ser acessado pelo seguinte link: youtu.be/zvNQ021GU-I

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SEGURANÇA INTERNACIONAL

Destaques sobre assuntos de segurança internacional

TECNOLOGIA, MÍSSEIS & SISTEMAS DE DEFESA

Destaques sobre emprego de tecnologias, mísseis e sistemas de defesa pelo mundo

ASTROS, FORÇAS ARMADAS & BID

Destaques sobre Forças Armadas, Indústria de Defesa e notícias sobre o Sistema ASTROS

1. Afghanistan: America pulls out the dagger

04.06.2021

Chatham House

https://www.chathamhouse.org/publications/the-world-today/2021-06/afghanistan-america-pulls-out-dagger

At a conference in Kabul more than a decade ago, an Afghan elder said something that at the time seemed dramatic, but which has made more sense over the years. From southern Afghanistan, known as the Taliban heartland, his family had suffered a lot of losses at the hands of both the Taliban and the American military.

'The US military invasion of our country [in 2001] was like getting stabbed,' he said. 'You bleed upon impact, but how the knife is pulled out determines the seriousness of your wound and chances of survival.'

Over the past 20 years, the fate of Afghanistan, now a nation of more than 35 million people, has intertwined with the American military presence. The changes in Afghan society during that time, for both good and bad, reflect a duality of violence and privilege that America unleashed.

It was on display on October 7, 2001, less than a month after the 9/11 attacks on the World Trade Centre in New York, that President George W Bush announced the invasion of Afghanistan. 'The Taliban will pay a price,' he said. Then a breath later: 'The oppressed people of Afghanistan will know the generosity of America and our allies.'

Now with the impending withdrawal of American and Nato troops from the country, the question is what will the impact be on Afghanistan and Afghans? It will be felt very deeply by everyone, but three effects are most threatening: a reduction in aid; diminishing political and diplomatic interest; and the intensification of a proxy war in Afghanistan by countries in the region.

America has two tangible assets that strengthen its influence on the ground – money and troops. The US has spent approximately $144 billion in Afghanistan on 'relief and reconstruction' since 2002, most on building new security sector institutions and maintaining Afghan forces.

According to independent research, the US Department of Defence and the State Department spent $978 billion on the Afghan war between October 2001 and the end of 2019. Only $36 billion of this has supported governance and development in Afghanistan.

Loss of aid will be catastrophic

Yet, the Afghan government and its institutions remain heavily dependent on external aid. This will not change even if the Taliban take over or become part of a future government. In 2018, World Bank estimates showed that Afghanistan drew some 40 per cent of its GDP from international aid.

Unsurprisingly, Afghans fear that the troop withdrawal will translate into reduction in US funding for Afghanistan, as was the case when the bulk of US-led Nato troops left the country in 2014. Any substantial

reduction in aid will be catastrophic for the fragile health, education, local governance and other public sector programmes, and will directly affect ordinary Afghan lives.

More ominously, external money has been instrumental in buying the loyalty of factions within the country through a neopatrimonial system that has hampered successive Afghan administrations over the past two decades. Patronage has become a key tool to manage divergent elite loyalties, ethnic qualms and local interests.

This patronage system is at the heart of astounding levels of corruption.

Afghanistan is ranked 165 globally on Transparency International's index for 2020. There are many reasons that Americans and Europeans did not bother to counter this, but it was mainly because these same elements were seemingly supporting the military objectives of the US in the war on terror.

An absence of aid will disrupt the patronage system, especially among armed anti-Taliban elements. This will have unintended consequences as the fragmentation it will produce could result in competition and violence over any remaining resources.

Secondly, the troop withdrawal could – by default – lead to a decrease in the political and diplomatic commitment by the US and other Nato countries to support a settlement between the Taliban and the Afghan government.

President Joe Biden's announcement of an unconditional and full military withdrawal from Afghanistan before the 20th anniversary of the 9/11 attacks in September 2021 is not a source of optimism for those who wanted to see a 'conditions-based' withdrawal of American troops. Washington is clearly keen to see America's 'forever war' come to an end as swiftly as possible. In the absence of American influence in the political process, the Taliban and Afghan government could increase attacks on each other significantly increasing the risk of violence faced by civilians.

Thirdly, a heedless military withdrawal will pave the way for a regional proxy war in Afghanistan. Pakistan, India, Iran, China, Russia and the Arab Gulf states could all resort to military competition through their proxy clients within Afghanistan.

This would result in a civil war, and no one Afghan faction being able to control the situation. The vacuum would be an ideal incubator for violent extremist groups to regroup and grow, including the Taliban.

Whatever the outcome of US actions, one thing is clear: just as the decision to invade Afghanistan in 2001 had nothing to do with Afghan lives, the past three US presidents have changed America's military course in Afghanistan without any regard for the Afghans. For millions of Afghans who put their trust in the world's superpower, the feeling of abandonment is palpable.

The dagger of military invasion has left deeper marks, but the seriousness of the wound will only become clear upon the withdrawal of international forces.

2. Closing the space between cybercrime and cybersecurity

29.05.2021

Chathan House

https://www.chathamhouse.org/2021/05/closing-space-between-cybercrime-and-cybersecurity

Although nothing new, ransomware attacks on critical national infrastructure have recently been held under a microscope due to a series of high profile incidents in which criminal groups – not states or state-sponsored groups – were identified as the perpetrators.

It is a widely accepted international norm that cyberattacks by states on critical national infrastructure are off-limits. Despite not entirely deterring states, this norm reflects conventional thinking that has focused predominantly on state behaviour vis-à-vis critical national infrastructure.

Traditionally, cybersecurity threats to infrastructure have been addressed at the United Nations (UN) via the parallel processes on global cyber governance in the Group of Governmental Experts on Responsible State Behaviour in Cyberspace and the Open-Ended Working Group on ICTs.

The UN has only recently initiated a treaty process specifically addressing cybercrime, with early sessions to negotiate a convention tackling it currently underway. Although cybercrime is a transnational crime which does not recognize borders, responding nationally and coordinating with actors from other jurisdictions is often the purview of law enforcement, justice, and interior ministries.

Broader context is needed

As the effects of cybercrime such as ransomware continue to cause widespread disruption against critical and high value targets, there is a need to better situate cybercrime in a broader national and international security context.

In terms of the recent attacks, the first came ahead of world anti-ransomware day on 12 May, when DarkSide, a ransomware-as-service criminal group believed to be based in Russia, launched an attack on the Colonial Pipeline in the US – resulting in the company shutting down a large part of its network, and paying $4.4 million as part of the ransom. The disruption also forced President Joe Biden to initiate emergency responses as fuel supplies across the East Coast in the US were affected.

Just one week later, Ireland's health service was hit by a Conti ransomware attack, also operated by an alleged Russia-based cybercrime group Wizard Spider. To prevent further damage, the service shut down IT systems resulting in cancer patients being unable to attend chemotherapy appointments and numerous child protection court cases being halted.

These attacks show disrupting critical national infrastructure is not an option only available to states, and that it is time to re-assess the intersections between cybersecurity and cybercrime. The persistent and disruptive threat of cyberattacks, regardless of the perpetrators, undermines the overall security posture of a nation because as core vulnerabilities are exposed cybercriminals exploit them and transfer risk in the 'cyber' domain to other areas, creating the kind of systemic disorder that national security aims to protect against.

The threat posed by state-sponsored actors to national security has been well documented and accounted for, but key strategic documents such as national security frameworks and risk registers often fail to

reference the increasing threat from cybercrime groups. This is despite cybercrime featuring in several national cybersecurity strategies.

It is essential to broaden the understanding of exactly what contributes to national security, and therefore what protection is needed. The plurality of actors using cybercrime as a means of disruption is significant, and a greater recognition of the threat posed would shift the focus towards mitigation.

Emerging from the siloes

The recent ransomware attacks also highlight that cybercriminals can carry out attacks with relative impunity. Reducing the fallout from cybercrime requires stepping out of a siloed approach which fails to appreciate the interconnectedness of cybercrime and cybersecurity. A fuller appreciation of the intersections between the two, and state and non-state actors, is the first step in adopting a holistic and fluid framework which deters, protects, and mitigates the disruption.

This call for a re-conceptualization is not novel. In April 2021, the Ransomware Task Force – made up of a number of civil society organizations, government agencies, and private sector organizations – published a framework which posits ransomware as a national security risk and recommends actions built on greater national and international coordination.

Removing the silo between cybercrime and cybersecurity should start at the national level with countries implementing national cyber coordination networks to coordinate the monitoring, prevention, response, and mitigation of cybercrime and cybersecurity threats.

In Canada the National Cybercrime Coordination Unit (NC3) works with partners across Canada to reduce the impact and threat of cybercrime and in the US a Cyber Unified Coordination Group (UCG) was set up in response to the SolarWinds hack. These initiatives demonstrate the need for greater coordination on cyber issues and are models to structure coordination on cyber threats to national security – whether cybercrime or state-sponsored incidents.

Cyber Coordination Networks could include personnel from computer emergency response teams (CERT), intelligence agencies, governments, law enforcement, national crime agencies, defence agencies, and industry. By having a formal cyber coordination network, resources can be pooled, and a range of key stakeholders have better oversight and understanding of threats and be able to participate in active learning and response.

At the international level, ongoing debates about cyber governance in the UN General Assembly first committee, and the recently-initiated third committee negotiations on a convention on cybercrime, should reflect a more nuanced approach to cybercrime as a threat to national and international security, appreciating the blurred lines between state and non-state actors and placing a greater premium on assessing or analysing attacks through the gravity of their consequences.

This should be supplemented by improved links between the various UN processes, allowing for cross-learning and collaboration on vital areas of coordination such as collection of evidence and the application of appropriate and relevant existing legal frameworks. The processes at the first and third committee are not parallel, so will ultimately lead to separate – but hopefully complementary – outcomes.

3. A Renaissance for Strategy? The NATO Summit 2021

11.06.2021

RUSI

https://rusi.org/explore-our-research/publications/commentary/a-renaissance-for-strategy-the-nato-summit-2021

NATO countries must undergo a renaissance in the way they collectively develop and execute strategy. The forthcoming Alliance summit is the right venue to start.

The heads of state and government of NATO countries are coming together in Brussels early next week to take the Alliance forward in the face of significant threats, not only to the post-Second World War rules-based international order, but also to the Alliance itself and incidentally to the political union which overlaps a good part of it, namely the EU.

The requirement is to better prepare NATO to deter aggression, disruption and malign influence from Russia today and possibly China tomorrow. The Alliance must also become much more engaged in growing and preserving stability in a number of neighbouring regions in which countries are threatened by poor governance, ethnic and religious conflict, competition for scarce resources, climate change and various other disruptive factors, the fallout from which threatens Western political and economic stability.

A Vision for the Future

Secretary General Jens Stoltenberg will be hoping that the summit discussions will prepare the way for his NATO 2030 vision, plans for which are progressing apace at the Alliance's Operational HQ, SHAPE. They will leverage the recent year-on-year increase in defence spending across the Alliance as member states have responded to the vital call to meet their agreed 2% of GDP target. In this respect the odd diplomatic hand grenade lobbed by the former US president was not entirely unhelpful, although one would hesitate to put too positive a spin on Donald Trump's term of office from the point of view of Alliance confidence and cohesion.

The NATO 2030 vision will focus on strengthening deterrence and defence by implementing the Concept for the Deterrence and Defence of the Euro-Atlantic Area and also the NATO Warfighting Capstone Concept. Together these seek to modernise NATO forces and increase their preparedness, readiness and deployability for operations. NATO deterrence is reliant upon enhancing national and collective resilience, and this is another theme picked up by NATO 2030 in seeking to achieve better coordination and complementarity with the EU.

NATO 2030 covers other areas, including preserving the Alliance's technological edge, supporting the rules-based international order, training and capacity building to assist Partners in confronting pervasive instability in NATO's neighbourhood, and addressing the effects of climate change. The vision will require NATO to develop a new Strategic Concept, the current one being over a decade old, and it is probable that heads of government will instruct the Secretary General at this summit to proceed with preparing one.

Broadening Consultation

One of the key themes within NATO 2030, however, is the need to broaden and deepen consultations between Allies, particularly to integrate non-military effects. This simple and obvious-sounding aspiration, if successful, could be the most significant achievement in decades. In the days of the Cold War, during

which NATO was born, 'grand strategy' was a term still in vogue. After the six long years of the Second World War, NATO countries understood that to achieve big strategic objectives, such as the defeat of Nazism in Europe, all national and alliance levers of power, both military and non-military, had to be brought together in proportion and in a fully integrated manner.

I remember when I was a relatively junior officer, the brilliant former Deputy Supreme Allied Commander Europe, General Sir Rupert Smith, reminded several of us on a visit to SHAPE that NATO, being a military alliance, delivers excellent military strategy but that it alone cannot be the architect of truly holistic strategy. His clear inference was that the military strategy produced by NATO must be combined with other non-military means to achieve politico-strategic objectives. This has to be done at the highest level before the work is handed down to military and other entities for execution, in order to avoid the sort of reverse engineering inherent in what the UK has in the past termed the 'Comprehensive Approach'. This lesson has been relearned at considerable cost over recent campaigns, in terms of dead and wounded Service personnel and local civilians, staggering financial outlay and serious damage to the wider civilian understanding of the utility of military force when applied in its proper context.

Afghanistan Withdrawal Symptoms

This summit will be the first following the decision to end the NATO mission in Afghanistan. This leaves most of us who served in that campaign feeling that we have failed our Afghan friends by promising much, and delivering very significant and beneficial change, only to see those gains frittered away – mainly on account of the absence of a coherent and integrated strategy from the start, which was the ultimate cause of the mission becoming too lengthy and costly, and the eventual erosion of political will.

It is easy to forget – since it was not well communicated at home – that by the time of the military surge in Afghanistan in 2010–11, when 140,000 NATO-led troops from 50 nations delivered force levels which were at last something like sufficient to enable the creation of a relatively stable and secure environment, considerable benefit had already been delivered to the Afghan people. Under the Taliban, only 9% of the population was within an hour of medical care; in 2014, 57% enjoyed that level of support from over 600 hospitals and clinics. Life expectancy under the Taliban was 44 years, but this was raised to 64 years during the International Security Assistance Force operation. Only 6% of the country had access to the electricity grid in the latter days of Taliban rule, but this was up to 30% by 2014. Moreover, while about a million boys are estimated to have been in school under the Taliban (and no girls), by 2014 this was up to eight million children, a third of them girls. Road infrastructure, access to free media, and the inclusion of women at senior levels across government and the professions had all also improved dramatically since Taliban rule, and a reasonably representative democratic process for the election of new governments had been successfully proven.

However, the slow pace of progress, in the absence of proportionate resources to rebuild political, economic, legal and other structures in the provinces, had been exploited by the Taliban and other insurgents, and high losses and costs had eroded political will at home. The resultant large-scale US withdrawal which began so soon after the successes of the surge, before the new Afghan Armed Forces and Police had even had the chance to properly bed in, began to unravel the whole campaign.

Drawing Lessons

Operations cannot be conducted like this in the future, particularly as the nature of warfare changes, requiring the integration of those non-military capabilities which have emerged or morphed significantly in recent years. Cyber warfare and a much more complex and pervasive information environment have grown, and both are exploited ruthlessly by competitors without reference to the rules that constrain NATO.

The space domain is growing enormously in significance and, particularly with the advent of AI, the decision-action cycle for the management of complex defence and security-related events has sped up to the degree that the integration of effects has to be immediate. This requires enhanced and much more nimble and responsive strategic planning and delivery structures at the top political levels of NATO states and within the Alliance. If deterrence is not done in a properly integrated way, NATO's competitors of today are likely to become its opponents of tomorrow, and it must be acknowledged that, advantaged by more centralised and authoritarian systems, they are currently ahead of the game. The recent Integrated Review seemed to signal a welcome move in the right direction in the UK, but the proof will be in the will of the UK's top-level leadership to ensure fine words are reflected in much-enhanced cross-governmental processes.

The Russians demonstrated in their annexation of Crimea in 2014 their ability to combine military and non-military effects, such as cyber and information warfare, political subversion and the use of paramilitary elements. This elicited some surprise in the West, but the 'new' Russian way of warfare, quickly labelled 'hybrid warfare', was no more than applying the principles of national strategy building. Similarly, China ruthlessly leverages its political, diplomatic and economic levers to manoeuvre itself into a favourable position with regard to possible future military and security objectives, whatever they may be. They must both be met with 'hybrid deterrence', which strengthens vital national and alliance infrastructure, both military and civil, threatens any potential attacker with the imposition of a cost which may well be best delivered asymmetrically, and builds resilience to ensure a rapid recovery of all capabilities in the event of damage.

A unifying theme of this NATO summit is likely to be the revitalisation of political unity following the election of President Joe Biden and his strong reaffirmation of transatlantic solidarity and US commitment to Article 5 of the Washington Treaty. This is the NATO Treaty Article that states that a threat to one requires a collective defensive response from all. Visits to NATO by US Secretaries Austin and Blinken, and the recent overflight of all NATO states by US nuclear bombers, have reinforced these signals of support.

However, the summit, being the coming together of the political leaders ultimately responsible for the integration of all the levers of power at their disposal, should not be satisfied with strong statements of unity alone.

There needs to be an acknowledgment that NATO countries must undergo a renaissance in the way they collectively develop and execute strategy, and this has to go far beyond the structures of the Alliance. It will require imaginative political solutions and much better coordination between NATO and the cross-governmental coordination architecture within individual governments, and most importantly with the EU, where collective political, economic, development aid, information and other strategies come together for the majority of NATO members.

NATO is without doubt the only entity with the command and planning structure capable of delivering the military strategy vital for collective defence in Europe and the North Atlantic region, but without a much-expanded and very much more responsive strategic process, Western values and political systems will surely suffer in the face of a significantly and rapidly changing world order.

4. Prioridades en la Defensa de Chile: infraestructura crítica, sistema de compras y modernización de Inteligencia

27.06.2021

Defensa.com

https://www.defensa.com/chile/prioridades-defensa-chile-infraestructura-critica-sistema

El ministro de Defensa Nacional de Chile, Baldo Prokurica, realizó su tradicional Cuenta Pública Participativa de la gestión 2020, en la que el pilar central fue el desempeño de las Fuerzas Armadas durante la pandemia por coronavirus y el despliegue durante el Estado de Excepción.

El secretario de Estado realizó una evaluación centrada en el trabajo de los miembros del Ejército, Armada, Fuerza Aérea de Chile y el Estado Mayor Conjunto desde que el 18 de marzo de 2020 se decretó el Estado de Excepción Constitucional por Catástrofe.

"Nunca, en la historia de nuestro país, nuestros militares han estado desplegados en tiempos de paz por un período tan prolongado, en labores de apoyo al Estado de Excepción Sanitaria. Así, el despliegue de miles de hombres y mujeres de nuestras instituciones de la Defensa parece fácil, pero ha implicado un esfuerzo logístico y profesional enorme, donde hemos podido demostrar a la ciudadanía el gran nivel de la preparación de aquellos que trabajan en este ministerio, en las Fuerzas Armadas y de cada uno de nuestros uniformados", destacó el ministro Prokurica.

El titular de Defensa agregó que el trabajo de las Fuerzas Armadas suma "más de 160 millones de controles en todo el país, donde han quedado detenidas más de 51 mil personas por incumplimiento de alguna norma sanitaria, gran parte de ellos por no respetar la cuarentena". Durante el período, 115 efectivos han sufrido accidentes, y dos de ellos resultaron fallecidos.

La autoridad también valoró el importante trabajo de apoyo a la ciudadanía evacuando a más de 260 enfermos críticos en aviones y helicópteros de la FACh; trasladando insumos desde China como ventiladores mecánicos; realizando cirugías en buques de la Armada para reducir listas de espera de hospitales públicos; reconvirtiendo camas críticas en los hospitales institucionales; repartiendo más de 110 mil raciones de alimentos; sanitizando viviendas o residencias del Sename y de adultos mayores y utilizando módulos del Hospital de Campaña del Ejército.

Además, las empresas de la Defensa, Famae, Asmar y Enaer desarrollaron los primeros ventiladores mecánicos hechos íntegramente en Chile, cuando a nivel mundial se vivía un quiebre de stock e, incluso, destinaron su labor a la producción de insumos como alcohol gel.

"Pero todo este tremendo esfuerzo que están realizando nuestras Fuerzas Armadas en materia sanitaria, no ha sido a costa de dejar aparte las otras labores que le corresponde a la Defensa Nacional, en especial las que tienen que ver con la ayuda directa que se entrega a la comunidad gracias a sus capacidades de polivalencia", señaló el ministro Prokurica.

Al respecto detalló labores que se han continuado realizando como la construcción de 124 kilómetros de caminos por parte del Cuerpo Militar del Trabajo en lugares muy extremos; apoyo ante catástrofes como el aluvión de San José de Maipo o en el combate de los incendios forestales en la Región de Valparaíso o en el sur del país; además, de los tradicionales operativos médicos en Chiloé y Rapa Nui.

El secretario de Estado resaltó, especialmente, el trabajo desarrollado por las FF.AA. durante el plebiscito de octubre y en las recientes elecciones de Constituyentes, Gobernadores, Alcaldes y Concejales que se extendieron en forma inédita por dos días, extremando los resguardos de urnas. “Esta tarea la han realizado de manera ejemplar durante 80 años”, puntualizó el ministro.

A ello sumó el despliegue producto de las misiones asignadas a través del Decreto Supremo Número 265, mediante el cual se apoya a las policías en logística, tecnología y transporte en las regiones de Arica y Parinacota, Tarapacá y Antofagasta para combatir el narcotráfico, crimen organizado, migración ilegal y tráfico de personas. “Cada vez que el país lo solicitó, nuestras mujeres y hombres del Ejército, Armada y Fuerza Aérea han acudido ya sea a bordo un camión, buque, avión o helicóptero, rápidamente a extender, como siempre lo han hecho, su mano amiga, su esfuerzo y trabajo en favor de sus compatriotas, de nuestras familias, hombres, mujeres y niños”, destacó en su presentación el ministro Prokurica.

“En general, este año fue sumamente complejo para el país y los chilenos, no obstante, nuestras Fuerzas Armadas continuaron operando y siendo esenciales en la protección de nuestra soberanía”, enfatizó.

Para lo que queda de este año y 2022, está previsto poner en marcha la Política Nacional de Defensa, publicada recientemente; continuar con el despliegue que se requiera para apoyar el combate al Covid-19; participar en los procesos eleccionarios de este año; mantener el trabajo de conectividad a través del Cuerpo Militar del Trabajo, y seguir participando en la contención y colaboración ante eventuales emergencias y desastres naturales.

En materia legislativa, dijo Prokurica, la prioridad estará en avanzar en los proyectos de ley de resguardo de la infraestructura crítica; el nuevo sistema de compras e inversiones de las capacidades estratégicas de la Defensa Nacional; la modernización de la carrera militar y la modernización del Sistema de Inteligencia del Estado. Además, se avanzará en la puesta en marcha del Sistema Nacional Satelital anunciado este miércoles con miras a poner en órbita un satélite que reemplace al Fasat Charlie al final de 2021 y la construcción del rompehielos Viel, en Asmar. “El compromiso permanente de la Defensa Nacional y de nuestras Fuerzas Armadas ha sido, es y seguirá siendo el estar al servicio de todos los chilenos”, sentenció Prokurica.

5. Ejercicio conjunto de tránsito marítimo de las Armadas de Argentina, Brasil, Paraguay y Uruguay

27.05.2021

Defensa.com

https://www.defensa.com/argentina/ejercicio-conjunto-transito-maritimo-armadas-argentina-brasil

Se está llevando a cabo el Ejercicio Internacional de Control Naval de Tránsito Marítimo (CNTM) COAMAS 2021, en el que participan las diferentes estructuras de tránsito marítimo de las Armadas de Argentina, Brasil, Paraguay y Uruguay. A nivel argentino, la conducción está a cargo del Comando Naval de Tránsito Marítimo (COTM).

Este ejercicio, que se realiza anualmente desde 1970, tiene por fin poner en práctica las regulaciones y normativas para la cooperación y el guiado del tráfico marítimo en el ámbito del Atlántico Sur y principales

vías fluviales. Asimismo, promueve la integración regional y el afianzamiento de los convenios que las Armadas vienen trabajando a lo largo de los últimos años.

La Armada de Brasil, estuvo a cargo del ejercicio y fue la responsable de plantear diferentes situaciones ficticias, simulando incidentes que ameritan un accionar combinado y multinacional. De esta manera se lograron evaluar no solo los procedimientos operativos, sino también los sistemas de comunicación y los tiempos de respuesta, priorizando siempre la salvaguarda de los buques mercantes y pesqueros.

Los participantes de la Armada Argentina en esta ocasión fueron personal perteneciente al Área Naval Fluvial, la Base Naval Puerto Belgrano, la Base Naval Mar del Plata, la Base Naval Ushuaia y el Apostadero Naval Río Grande, reuniendo un total de más de 50 efectivos trabajando online en simultáneo.

Esta actividad resulta fundamental consolidarla en tiempo de paz al coordinar las acciones inherentes al monitoreo, dirección y defensa del transporte marítimo, pesca y otras actividades económicas desarrolladas en las aguas de interés nacional con el accionar de los países de la región, a fin de contribuir a la seguridad del tráfico marítimo cuando surge una crisis o conflicto armado.

6. Japan's Defense Industry Faces Challenges as China Threat Looms

21.06.2021

National Defense Magazine

https://www.nationaldefensemagazine.org/articles/2021/6/21/japans-defense-industry-faces-challenges-as-china-threat-looms

Confronting economic and security challenges, Japan aims to boost its defense industrial base and sell more military equipment overseas to allies and partners. However, it must overcome a number of problems to realize its goals, analysts say.

Over the past decade, Tokyo has rolled out new guidance including: a new National Security Strategy (2013), Strategy on Defense Production and Technological Bases (2014), and a revised policy on defense exports (2014). In 2015, it also stood up a new Acquisition, Technology and Logistics Agency to enable more cost-effective acquisition and promote international outreach. The moves came amid growing concerns about China's military modernization and aggressive behavior toward Japan and other nations in the Asia-Pacific region.

"In order to develop, maintain and operate defense capability steadily with limited resources in the medium- to long-term, Japan will endeavor to engage in effective and efficient acquisition of defense equipment, and will maintain and enhance its defense production and technological bases, including through strengthening international competitiveness," the National Security Strategy stated.

However, the nation is hindered by a number of factors. One is that, unlike the United States and other developed countries, it has few defense-focused firms, noted retired Lt. Gen. Shinichi Iwanari, former commander of Air Development and Test Command for the Japanese Air Self-Defense Force.

"Most defense companies in the U.S. focus … on the military sector strategically. They have market penetration strategies and product development strategies," he said through an interpreter during a recent panel hosted by the International Security Industry Council Japan, a Tokyo-based nonprofit.

In contrast, Japanese companies that supply military equipment to the nation's Self-Defense Forces are still more focused on the civilian sector, Iwanari noted.

Japan's defeat in World War II — and subsequent adoption of a pacifistic foreign and defense policy that lasted for 70 years — created conditions that led to the country's current situation, he said.

"Military work disappeared and civil work took center stage," he explained. "That diversification predominates as a business strategy" today, he added. "Looking at the composition of Japan's defense industry, most of the companies have many business divisions, and defense accounts for only a few percent of their business."

Gregg Rubinstein, a Japan expert at the Washington, D.C.-based Center for Strategic and International Studies, said the country's defense industry is characterized by inefficient, high-cost production, and research-and-development efforts that "mostly reinvent" foreign products with little innovation.

Meanwhile, it has to contend with relatively flat procurement funding and increased imports of high-cost advanced equipment, he noted.

Japan ranked ninth in the world in defense spending in 2020 at $49.1 billion, according to the Stockholm International Peace Research Institute, which tracks global military expenditures. Its defense budget grew just 1.2 percent from 2019 to 2020, and 2.4 percent over the past decade, according to SIPRI.

Meanwhile, the nation was a top 12 importer of military systems in 2020, according to the institute. Ninety-seven percent of those imports were supplied by the United States, Japan's closest ally.

Tokyo purchases much of its equipment through foreign military sales, which increased from about $1.7 billion in 2014 to about $6.4 billion in 2019, according to Michihiro Akashi, an analyst with the Mitsubishi Research Institute, a Japanese think tank.

"FMS is a quick and effective way for Japan to secure the means to counter new threats," he noted in a presentation earlier this year titled, "Toward Sound Development of the FMS System and Japan's Defense Technology and Industrial Base."

However, "the increase in FMS costs has raised concerns that Japan's difficult financial situation will put pressure on the number of orders placed with the domestic defense industry," he said. "The contribution of the Japanese defense industry to imported equipment is low and this puts pressure on the value of orders."

An example of a high-end foreign system purchased by Tokyo is Lockheed Martin's F-35 joint strike fighter. Japan has a final assembly and check-out facility in-country but, unlike a number of European nations who operate the jet, was not involved in the joint development of the platform or the program's vast international supply chain.

The country has built other aircraft, including F-15s, under license.

Rubinstein said Japan's defense industry can "survive" on licensed production and support of imported systems, but that won't be enough for it to grow.

International trade and investment are critical to Japan's future defense industrial base, he said. To remain competitive, it must market its products and technologies to the outside world.

It has a lot of work to do in this regard. The nation did not even make it onto SIPRI's list of the top 25 arms exporters for the 2016-2020 time frame.

“Government and industry often seem to work at cross purposes on international engagement. Industry tends to blame government for lack of guidance while the government of Japan blames industry for not trying hard enough to take initiatives,” Rubinstein said. “Each awaits action by the other, and often nothing happens as a result.”

Protectionist R&D efforts continue to discourage international collaboration and isolate Japan, overly complex export control processes lack transparency and offer little guidance for industry, and information security measures lack central oversight as well as effective coordination with industry, Rubinstein said.

“This situation unavoidably has a negative impact on international partners and customers,” he said. “Japan today remains almost invisible to the international defense community. There is little awareness or appreciation for Japanese industrial and technology capabilities. There is a continued perception that Japan is difficult to work with and possibly not worth the effort to engage.”

Government and industry must work together to address the problem, analysts say.

Japanese military products and R&D capabilities must become more attractive to potential partners and customers, Rubinstein noted.

However, efforts to boost international engagement must start with an effective export strategy.

The government and industry must develop a better approach to military exports and joint technology development that balances industrial capabilities with arms control and security concerns. Tokyo should prepare guidelines for industry engagement of foreign partners that include appropriate mechanisms for government-industry consultations, Rubinstein said.

Expanding the government’s overseas presence is also viewed as critical.

“The government of Japan needs to strengthen its overseas representation on defense acquisition interests in a manner similar to defense procurement offices used by other governments that engage heavily with the U.S. and advanced defense industrial countries,” Rubinstein said.

Masamitsu Morimoto, a lecturer at Keio University and former deputy director of security export control policy at the Ministry of Economy, Trade and Industry, said Japan’s Acquisition Technology and Logistics Agency in particular needs to deepen its ties with foreign nations to aid industry.

“They need to build long-term relationships in order to do that,” he said through an interpreter, adding that potential sales and joint development opportunities should not be viewed as “one-off matters.”

But the government isn’t the only organization that needs to do more. Industry also needs to play a more active role, analysts say.

“Engaging international defense markets means more than simply selling equipment,” Rubinstein said. “Industry must have overseas presence. Representative offices are only a start; companies must invest in overseas facilities to gain visibility in the international community. Industry initiatives will in turn need government guidance and support.”

Morimoto said the Japanese defense industry needs to have more of a “sales-oriented philosophy.”

“It is something that I think we can clearly say is missing,” he said. “There wasn’t a need for sales [promotion] in some sense until now, because we were selling to the Japanese government” almost exclusively.

Further measures from government and industry that could help include: providing financial guarantees; allowing industrial "offsets" for recipient countries; conducting more joint development of technologies with allies; and offering training and operational support for exported systems, analysts say.

Rubinstein said there must also be greater allowance for foreign investment in Japan. "Laws, regulations and thinking on this subject must adjust to current day reality," he said.

Analysts criticize the nation's export control regime. In 2014, when former Prime Minister Shinzo Abe was promoting a more muscular foreign and defense policy, the Three Principles on Transfer of Defense Equipment and Technology replaced the nation's previous guidelines on arms exports, which had largely banned overseas sales of military equipment.

"Surrounded by an increasingly severe security environment, it has become essential for Japan to make more proactive efforts in line with the principle of international cooperation," the Ministry of Foreign Affairs stated in a press release. "Japan cannot secure its own peace and security by itself, and the international community expects Japan to play a more proactive role for peace and stability in the world commensurate with its national capabilities."

According to the updated principles, arms transfers can be permitted if they: promote "peace," international cooperation, or Japan's security; don't violate international treaty obligations or UN Security Council resolutions; and there is "appropriate control regarding extra-purpose use or transfer to third parties."

Proposed transfers still must undergo a strict review by the Ministry of Economy, Trade and Industry, also known as METI, before they are approved. In some cases, they must also be reviewed by the National Security Council. Additionally, the recipient of the weapons must seek Tokyo's consent.

There is a lack of transparency, and it is still unclear to many in industry whether certain proposed military technology transfers are likely to be deemed "acceptable" after review, Morimoto said.

"For the purpose of people who would be exporters, this is a very difficult thing to understand," he said. "From the viewpoint of industry, there is still a low level of predictability on export approvals."

There are also issues with other aspects of the process such as application forms, he added.

"People don't know how those work," Morimoto said. "For the exporter, it's impossible to judge what the risk is. That I think is leading to a chilling effect, or may lead to a chilling effect, on industry willingness to participate or to approach METI."

An insufficient understanding of these processes could hinder talks with would-be buyers, he noted.

"Is the defense industry prepared to explain export control matters to its foreign partners?" Morimoto asked.

There are market opportunities for Japan, particularly when it comes to dual-use items, according to analysts.

However, considering the needs of customers, provision of finished products and services will be difficult, with some exceptions, Iwanari said.

Some in the Japanese defense community have viewed international engagement as a threat to indigenous capabilities, but experience in other countries shows that the gains will likely outweigh the risks, Rubinstein said.

“Today, Japan’s defense industry faces a critical challenge: how to ensure that its defense industrial and technology base remains an effective national resource,” he said. “Laws mean very little without effective implementation, and … there has so far been little change in the defense industry situation” in recent years despite government efforts.

7. Biden to Stay Course on Nuclear Modernization

15.06.2021

National Defense Magazine

https://www.nationaldefensemagazine.org/articles/2021/6/15/biden-to-stay-course-on-nuclear-modernization

Despite calls from some Democrats and arms control advocates to slash spending on strategic forces, the Biden administration appears committed to forging ahead with previous administrations’ nuclear modernization programs.

The U.S. nuclear arsenal comes with a high price tag. The Congressional Budget Office recently estimated that it will cost $634 billion to operate, sustain and modernize the nation’s forces during the 2021-2030 time frame, based on plans submitted by the Trump administration last year.

Some observers hoped — and others feared — that President Joe Biden would scale back these plans. But his budget request for fiscal year 2022 suggests that won’t be the case.

“Modernizing the nation’s nuclear delivery and command, control and communications systems is the [Defense] Department’s No. 1 priority,” according to Pentagon budget documents.

The Biden administration requested a total of $43.2 billion for the nuclear enterprise, including $27.7 billion for Pentagon systems and $15.5 billion for weapons activities of the National Nuclear Security Administration, which oversees the nation’s warhead stockpile.

The total amount is $1 billion less than was enacted for 2021, but major modernization programs saw funding increases. The Ground-Based Strategic Deterrent, or GBSD, would receive $2.6 billion, up from $1.45 billion in 2021. The Columbia-class ballistic missile submarine would get $5 billion, up from $4.5 billion. The B-21 bomber would be allotted $2.9 billion, up from $2.8 billion. And a new air-launched cruise missile known as the Long-Range Stand Off weapon, or LRSO, would receive $609 million, up from $385 million.

Todd Harrison, director of defense budget analysis at the Center for Strategic and International Studies, noted that the requested amount for LRSO is about 70 percent higher than was previously projected for the program in 2022.

“It appears that they are accelerating that program. And that is something that had been a target by some arms control advocates and more progressive Democrats in Congress,” Harrison said during a recent panel. “They’re really doubling down on LRSO in this budget.”

Meanwhile, nuclear command, control and communication systems would get $2.9 billion, up from $2.7 billion in 2021.

Notably, the fiscal proposal doesn’t eliminate plans for a nuclear-armed sea-launched cruise missile, or SLCM-N, a new weapon that was proposed during the Trump administration. The Biden administration’s request includes $5.2 million for development work and $10 million for a low-yield warhead for the system. The SLCM-N and low-yield warheads were expected by many observers to be nixed under Biden.

“No change is the story here,” Harrison said of the new administration’s proposal. “There’s going to be very little change in nuclear modernization plans from the Obama administration to the Trump administration to the Biden administration. The big modernization programs are planning to continue on track.”

Arms control advocates are none too happy.

The Council for a Livable World denounced the request for $43.2 billion for strategic weapons, describing it as “exorbitant.”

“The fiscal year 2022 Biden budget requests funds for, or even expands, nearly every nuclear program from the Trump administration,” the group said in a statement. “We are particularly disappointed by the fact that the Biden administration is planning to move forward on Trump-era plans to develop a new nuclear sea-launched cruise missile. … We are further disheartened that the administration requested a dramatic increase in funding for the new Ground-Based Strategic Deterrent.”

Aviation Week subsequently reported that the Navy may try to cancel SLCM-N in future budget cycles.

Although some observers were taken aback by Biden’s budget proposal, Harrison said he wasn’t surprised.

“Look at who the Biden administration has been tapping for key positions in defense,” he said. “It’s not folks who have a history of wanting to cut nuclear modernization. It’s people who have a history of supporting it, and some people who served in the Obama administration who were instrumental in crafting these modernization programs. … It’s really a stay-the-course type of signal that we’re getting.”

8. JUST IN: Pandemic-Battered Defense Industrial Base Slow to Return to Normal

14.06.2021

National Defense Magazine

https://www.nationaldefensemagazine.org/articles/2021/6/14/just-in-pandemic-battered-defense-industrial-base-slow-to-return-to-normal

While life is returning to normal for many Americans as COVID-19 cases recede, it’s not yet business-as-usual for the defense industrial base, according to a new survey released June 14.

In a survey of more than 200 members, the National Defense Industrial Association found that although most states have lifted COVID-19 safety restrictions, 31.5 percent of respondents reported that they do not expect operations to return to normal for more than six months. The study — titled "NDIA Vital Signs Pulse Survey" — is part of the association's Vital Signs project. NDIA previously conducted two surveys in 2020 at the request of the Pentagon to gauge the health of the industrial base as the pandemic raged.

Corbin Evans, NDIA's principal director of strategic programs, said while he is encouraged that defense companies seem to be weathering the pandemic slightly better than firms of the same size in other industries, not everyone is out of the storm yet.

“There are still a large percentage of companies in this industry that are experiencing negative impacts that have not returned to normal business,” he said in an interview.

Small defense businesses were about 32 percent less likely to experience large negative effects compared to non-defense industry businesses, according to the survey. But the disparity between small and large defense industry businesses is still “concerning,” Evans said. Companies with under 50 employees in the defense industrial base were far more likely to experience negative impacts than larger firms, the survey found.

“We want to ensure that policymakers recognize that ... and programs are provided to ensure that these companies continue to ... survive and thrive,” he said.

The NDIA survey included data from individuals who provided responses over a three-week period in April and May. The participants ranged from businesses that employed less than 25 individuals to companies with more than 10,000 employees.

The survey broke down the factors impacting operations into four categories: revenue expectations, confidence in supply chain partners, availability of workforce and ability to perform on contracts.

Forty one percent of respondents said COVID-19 affected revenue expectations — the highest percentage of the categories, according to the survey.

Previously, an NDIA survey from July 2020 found that nearly 35 percent of participants said COVID-19 had a major impact on their revenue expectations. That percentage dropped in the most recent survey to about 19 percent.

Meanwhile, 31.7 percent of respondents said confidence in supply chain partners was the most affected category of operations.

While Evans noted that there has been some improvement, the factor most affecting operating capacity is still the availability of employees to work. About 41 percent of participants said it was the most common factor, while nearly 10 percent reported physical distancing and limits of customers or clients as another common factor.

It is "encouraging to see that that level of concern has decreased over the past year,” he said.

NDIA — the publisher of National Defense — plans to keep an eye on the percentage of defense industrial base companies requiring vaccination for employees, Evans said. About 11 percent of survey respondents said proof of vaccination is currently required or will be in the future.

While that percentage is relatively low compared to the 85 percent of respondents who said vaccination was not required, it was higher than policy and strategy experts at NDIA were expecting, he said.

9. The Return of Geopolitics: Latin America and the Caribbean in an Era of Strategic Competition

17.06.2021

CSIS

https://www.csis.org/analysis/return-geopolitics-latin-america-and-caribbean-era-strategic-competition

INTRODUCTION

With the advent of the Biden administration, it has become clear that the idea of focusing U.S. foreign policy on strategic competition enjoys widespread bipartisan support. U.S. statecraft is increasingly directed at the threats posed by powerful state rivals—especially China—as opposed to Salafi-Jihadist extremists and other non-state actors.

Yet geopolitical rivalry is not simply something that happens "over there" in the Indo-Pacific, Europe, and the Middle East. It also happens "over here," within the Western Hemisphere.

Just as geopolitical competition is more the norm than the exception for the United States, historically, America has faced recurring threats from major-power rivals operating in Latin America. This pattern is repeating itself today, as the countries—China, Russia, and to a lesser extent, Iran—with which the United States is competing in overseas regions are, in turn, competing with the United States in its shared neighborhood. These challenges have not yet risen to the level of the Cold War-era threat posed by the Soviet-Cuban alliance or even the Nazi presence in many Latin American countries prior to World War II. But they are gradually calling core U.S. strategic interests in Latin America into question.

For roughly 200 years, the core U.S. interest in the region has been strategic denial— preventing powerful rivals from achieving strategic footholds in Latin America or otherwise significantly impairing U.S. influence and security in the hemisphere. The nature and severity of challenges to that objective have varied over time, as have the urgency and methods of the U.S. response. As the United States enters a new period of geopolitical rivalry, it must update its understanding of strategic denial to fit the facts on the ground.

This paper offers an intellectual starting point for that endeavor. It is intended to help the U.S. national security community think through the imperative of strategic denial and hemispheric defense in the twenty-first century.

First, we discuss the meaning and logic of strategic denial and how that policy has evolved over time. Second, we explain why the United States has sometimes been slow to respond to threats in the Western Hemisphere, and the blind spots that have hindered its ability to spot emerging threats in recent years. Third, we offer a detailed review of the activities that China, Russia, and Iran are undertaking in the Western Hemisphere and the specific challenges they pose to core U.S. interests. Fourth, we identify tipping points at which extra-hemispheric influence could seriously damage U.S. security and influence throughout the region. Finally, we briefly discuss several principles for a U.S. response.

These include:

(1) Track extra-hemispheric influence more systematically. The U.S. government will need to comprehensively catalog greatpower activity and presence in its shared neighborhood to avoid ad hoc responses to strategic challenges.

(2) Track vulnerabilities as well as strengths. The expansion of Chinese, Russian, and Iranian influence in Latin American and the Caribbean has not always been a popular phenomenon. Studying which aspects of these countries' regional presence create diplomatic or soft-power vulnerabilities is a starting point for developing a more competitive response.

(3) Engage on security issues of greatest concern to local governments and peoples. The United States must present itself as the preferred partner to help countries in the Western Hemisphere address their security concerns. To do so, America must prioritize the most pressing security challenges of its partners—and understand that those challenges are quickly shifting.

(4) Counter the authoritarian playbook. Maintaining the largely democratic nature of the region and focusing on improving the quality of governance and political institutions can reduce the number of openings for rival influence. Do not make it all about China. There is no question that U.S. interest in Latin America and the Caribbean rises when perceptions of extra-hemispheric threats become more acute. But it is a mistake to convey the impression that Washington cares about the Western Hemisphere only because of the Chinese, Russian, and Iranian threats.

(5) Emphasize cost-effective means of competition. When resources are relatively scarce, the United States will need to find ways to increase the bang it receives for each buck. For example, International Military Education and Training (IMET) initiatives are an inexpensive means of building relationships with the next generation of Latin American military leaders—relationships that the United States is in growing danger of not having in the future.

(6) Leverage non-governmental advantages. The United States has deep cultural, political, and historical ties with its southern neighbors. Facilitating people-topeople diplomacy can be a cost-efficient way for the United States to strengthen its hemispheric relationships and limit the influence of its great-power rivals.

(7) Understand that you ultimately get what you pay for. A resource-poor approach to the region has inherent limitations. If the United States does not ultimately pursue a better-resourced, whole-of-government approach, it may once again have to make larger compensatory investments later when strategic challenges have become impossible to ignore.

In the Western Hemisphere, the United States has an unfortunate tendency to downplay growing threats until they finally elicit a panicked response. The United States must get ahead of the curve by reframing strategic denial for an era in which great-power competition is likely to intensify in the years ahead.

THE TRADITION OF STRATEGIC DENIAL

The idea of Latin America as a theater of intense, if quiet, strategic rivalry would not have come as a surprise to most U.S. officials in previous eras, even if the notion sounds jarring today.

The breakup of colonial rule in Latin America and the Caribbean in the early nineteenth century unleashed several subsequent waves of sometimes-violent geopolitical contestation for influence in the region. Participants included a rotating cast of European powers—from the United Kingdom to Nazi Germany to the Soviet Union—and, of course, the United States. It was only with the end of the Cold War that Latin America receded briefly in its relevance to great-power politics—largely because greatpower politics itself

seemed to recede in an atmosphere of U.S. dominance and liberal democratic supremacy. Before that, Western Hemisphere countries were often the objects of ideological and strategic competition among the major powers; they were also strategic actors, through the choices they made and the alignments they sought or spurned, in those same affairs.

As a result, previous generations of U.S. policymakers would have had little difficulty articulating the strategic importance of the Western Hemisphere. Latin America and the Caribbean matter to the United States not just because of extensive economic ties and the deep human and cultural connections that have developed over time (and impact U.S. domestic politics), nor because it has constituted a regional community of democracies in recent decades. From a geostrategic perspective, Latin America and the Caribbean—particularly the countries of the Caribbean basin—represent the most direct vector for political instability or security threats to reach the United States. In the nineteenth century, the region was the theater that, in unfriendly hands, could present formidable challenges to the physical security and even the survival of a fledgling republic. Since the early twentieth century, it has been the "strategic rear" whose tranquility—or volatility—profoundly affects America's ability to act effectively on the global stage.

After all, it was not until Washington had established its own regional preeminence, punctuated by victory over Spain in 1898, that it could consistently project power into regions farther afield. Global influence has long required regional preeminence for the United States: Only a country not constrained by a balance of power near its borders can decisively affect the balance of power overseas.

The essential thrust of U.S. policy in the Western Hemisphere has thus been strategic denial visà-vis other great powers. U.S. officials have sought to prevent major rivals from developing regional footholds from which they can menace, distract, or otherwise undercut the strategic interests of the United States. There has also been a persistent, if not always consistent, ideological component to strategic denial—a belief that non-democratic political systems in Latin America and the Caribbean constitute a conduit through which malign actors can exert their influence. "It is impossible that the allied powers should extend their political system to any portion" of the Americas, stated James Monroe in his eponymous doctrine, "without endangering our peace and happiness."

Yet if the basic objective of strategic denial has endured over time, the manifestations and targets of that policy have repeatedly shifted. The Monroe Doctrine warned against a restoration of formal European colonial empires in Latin America; the "political system" it sought to exclude from the hemisphere was monarchy. Although John Quincy Adams prevailed on Monroe to issue that statement as a unilateral declaration rather than "come in as a cockboat in the wake of the British man-of-war," it was London—which had its own policy of strategic denial vis-à-vis its European rivals— whose navy enforced the edict for most of the nineteenth century. The United States, for its part, spent much of this period trying to prevent, not always successfully, the expansion of European influence in Latin America rather than liquidating it where it remained.

This posture changed in response to growing U.S. power and shifting international threats. In 1898, the United States defeated—for the first time since the American Revolution—a European power in a major military conflict and thereby banished Spain from the hemisphere.

During the 1890s and early 1900s, the United States used various forms of coercive diplomacy to reduce a distracted United Kingdom's influence around the Caribbean basin and gain exclusive control over the routes for an isthmian canal. Meanwhile, concerns that internal instability and financial insolvency might invite European intervention elicited the Roosevelt Corollary, which established a tradition of "protective imperialism" of Washington intervening in troubled Caribbean countries so hostile actors would not have a pretext to do so. This theory of strategic denial paved the way for multiple U.S. interventions— in the Dominican Republic, Haiti, Nicaragua, even Mexico—in the subsequent decades.

That heavy-handedness provoked blowback, however, and in the Franklin Delano Roosevelt era, strategic denial took on yet another form—this time under the moniker of a "Good Neighbor Policy." Roosevelt would end lingering U.S. occupations, hoping that a less invasive presence focused more on economic ties, deemphasizing the military dimension of strategic denial—combined with the steady hand of friendly dictators—would better consolidate the hemisphere against the growing fascist threat. At the Havana Conference in 1940, the United States announced, in the guise of a multilateral declaration, that it would enforce the Monroe Doctrine against any extra-hemispheric power that violated the territorial or political sovereignty of a Western Hemisphere state. The fear persisted, particularly after the fall of France, that Nazi Germany would use subversion, economic coercion, or even direct aggression to turn South American or Central American countries into platforms to threaten the United States. In response, Washington used various methods, from good intelligence work to blunt diplomatic pressure, to limit German influence in the region and eventually bring Latin American and Caribbean governments into World War II on the side of the Grand Alliance.

During the Cold War, the target of strategic denial was Moscow. The danger was that local communists would take power through peaceful or violent means and turn their countries into beachheads for Soviet military and political influence. As Castro's revolution in Cuba showed, a Soviet presence in the Caribbean would endanger U.S. sea lines of communication and expose major gaps in the country's air defenses. It would be a launching point and logistical, financial, and training hub for other burning insurgencies in the region. A United States consumed with fighting communist regimes, and revolutionaries close to home would, in turn, find it far more difficult to concentrate its energies on checking Soviet influence in Europe, the Middle East, or Asia. It might even find its physical security endangered. It was this prospect that led Jeane Kirkpatrick to declare in the 1980s that Central America was "the most important region in the world."

The United States used the full panoply of tools—economic development programs, military coups, covert action, and direct military intervention—to fight the expansion of Soviet and Cuban influence. In some cases, it sought to promote democracy and economic reform as antidotes to revolution; in others, it partnered with conservative or downright reactionary Latin American regimes such as the Brazilian military dictatorship to bludgeon leftist movements. But by the 1980s, Washington was more decisively moving toward a strategy that employed democratization as a tool of strategic denial by establishing legitimate regimes that would be less vulnerable to challenges by Marxist insurgents.

Within another few years, the Cold War had ended, and the threat of alien ideologies and extra-hemispheric power faded more fully than ever before. They did not, however, disappear for good.

U.S. BLIND SPOTS AND THE LATIN AMERICA PARADOX

The post-Cold War era also revived another less salubrious tradition in U.S. policy—the Latin America paradox. That paradox resides in the fact that Latin America is perhaps the most critical region for the United States, in the sense that pervasive insecurity or danger could pose a more direct threat to America than an equivalent disorder in any other region. The Mexican Revolution, for example, elicited not one but two U.S. military interventions for just this reason. But Latin America has traditionally received considerably less foreign policy attention than other regions because American influence there—while periodically challenged—has long been so preeminent.

This paradox is not new: It is one reason why, even during the Cold War, Washington went through periods of intermittent engagement with the region (the Eisenhower era) followed by periods of intense concern bordering on panic (the Kennedy years). This spasmatic history is now repeating itself: Over the last three decades, the U.S. tendency to treat Latin America as a tertiary concern has created a blind spot in U.S. strategy, making it harder to spot threats as they emerge.

Since the 1990s, this blind spot has been exacerbated by several other factors. First, although there have been serious security challenges in the region, most have taken the form of drug-related violence and out-of-control criminality, domestic challenges often viewed as law enforcement matters that lack an obvious geopolitical salience. Compare, for instance, the remarkably scant attention that ongoing state failure and rampant violence in Mexico have received over the last 15 years to the attention those phenomena would have received had they been caused by a communist insurgency with links to the Kremlin during the Cold War. "Law enforcement problems" are, by their nature, unsexy in the foreign policy world.

Second, the largely democratic nature—or perhaps the democratic patina—of the region has masked the severity of underlying challenges. Since the early 1990s, the vast majority of Latin American and Caribbean governments have been democracies in the sense that they have regular, contested elections. After Mexico's transition in 2000, Cuba was the only fully authoritarian regime in the hemisphere. Yet the existence of democratic procedures, consolidated in regional diplomatic accords such as the InterAmerican Democratic Charter, has obscured concerning levels of political backsliding in countries from Central America to the Southern Cone, in addition to the emergence of violently repressive authoritarianism in Venezuela. It has also dulled the U.S. response to the creeping accumulation of extra-hemispheric influence in hemispheric affairs, in many cases through the same countries experiencing a rapid decline in the quality of democratic governance.

Finally, blind spots in Latin America have been exacerbated by the intensity and number of challenges the United States has confronted elsewhere. Prior to 9/11, the George W. Bush administration had signaled it would make relations with Latin America a top priority. That subsequently changed dramatically. The 9/11 attacks led to a heightened focus on Colombia because its guerrilla insurgency could be viewed through a counterterrorism prism. But in most cases, the "war on terror" diverted focus from the region. More recently, U.S. resources and attention have been consumed by a remarkably full foreign policy agenda—ongoing instability in the Middle East and Africa, a resurgent and revisionist Russia, periodic North Korean nuclear crises, the rise of China as a regional and increasingly global power, along with the pressing problems posed by climate change, pandemics, and other transnational challenges. Even as the situation has deteriorated in Latin America and the Caribbean, the region has had to compete with a remarkably crowded and challenging foreign policy panorama.

For much of the post-Cold War era, the nearterm costs of inattention were limited because serious challenges to strategic denial remained far over the horizon. Yet the costs are rising as that horizon approaches, and a great-power rivalry once again intensifies. During the Trump years, U.S. officials such as Secretary of State Rex Tillerson and National Security Advisor John Bolton went so far as to restate the Monroe Doctrine in response to the growth of Chinese influence in the Western Hemisphere. Yet those warnings simply obscured the fact that America's rivals are once again competing vigorously in its shared neighborhood. Their strategies are far better developed than the U.S. response.

CONTEMPORARY CHALLENGES: CHINA

The primary threat to U.S. interests in Latin America comes from China because Beijing is the most significant global challenge for U.S. statecraft and its presence in the Western Hemisphere is multifaceted and widespread. Whereas Russia and Iran are malign actors whose capabilities remain limited, the People's Republic of China (PRC) has the resources, capacity, and—increasingly—the desire to shift the overall climate of hemispheric relations in decidedly adverse ways. As part of a strategy to increase its influence and options in the region while creating potential problems for the United States close to home, China engages governments and supports political models in the region that are hostile to U.S. interests while also courting traditional U.S. allies.

Economic Engagement

The leading edge of China's involvement in the Western Hemisphere is economic. For roughly a generation, Beijing has been leveraging its massive domestic market and vast financial resources to draw countries in the region closer and pull them away from Washington. China is now the region's second-largest trade partner behind the United States. While the United States still enjoys a comfortable lead in this metric, its advantage has been eroding since the turn of the century. Between 2000 and 2018, the percentage of Latin American exports going to the United States dropped from 58 to 43 percent while it increased from 1.1. to 12.4 percent with respect to China. In fact, discounting Mexico, China already surpassed the United States as the largest destination country for the region's exports. Importantly, China has linked itself closely with the largest economic power in the Western Hemisphere outside the United States—Brazil. Beijing has become Brazil's most important commercial partner, doubling in size compared to the BrazilU.S. commercial relationship.

Besides trade, finance is another powerful economic tool of the Chinese government. Many countries in the region see the Chinese as an attractive source of financing, as they do not set conditions on their loans, such as environmental impact standards or anticorruption benchmarks. Between 2005 and 2020, China's investment and construction contracts in the hemisphere (including the United States) totaled over US$440 billion.

China also uses its Belt and Road Initiative (BRI) to project its economic power and improve its geopolitical position. Since its launch in 2013, BRI has become one of the most ambitious global development programs in history. According to Chinese officials, its rapid growth in Latin America represents a "natural extension of the 21st Century Maritime Silk Road." Thus far, 19 countries in Latin America have signed on to BRI—including some of the most prosperous countries, such as Chile.

While BRI is attractive to recipient nations because it purports to address real infrastructure needs and other development shortfalls, the resulting Chinese economic leverage can become a means of extracting political concessions. For example, when Sri Lanka fell into arrears on the loans it had taken from China (loans other sources had declined due to risk), it was left with no other option than to turn over the Hambantota Port with thousands of acres of land surrounding it to the Chinese for 99 years. While thus far China has preferred to extend loan repayment timelines and offer new lines of credit, it could use the tactic employed in Sir Lanka to obtain strategic footholds in the Western Hemisphere, perhaps taking advantage of high debt burdens owed by small island nations in the Caribbean. Regionwide, the acute debt crisis that could be the legacy of COVID-19 may provide further openings for predatory Chinese finance throughout the region.

China also leverages its economic power in Latin America to erode what modest diplomatic support Taiwan still enjoys. Latin America and the Caribbean remain Taiwan's largest regional block of recognition, with nine of the 15 countries that formally recognize Taiwan located in the region. However, China has started to reverse this bastion of Taiwanese diplomatic recognition. Countries that recognize Taiwan are denied access to the massive Chinese domestic market and Chinese investment and finance opportunities, including the BRI. Accordingly, through its economic power (and coercion), China has recently persuaded Panama (2017), the Dominican Republic (2018), and El Salvador (2018) to change their diplomatic recognition from Taipei to Beijing.

Technology Sharing

Technology is another weapon of Chinese influence in Latin America. Huawei, the Chinese telecommunications company, is one of the market leaders of mobile devices in the hemisphere. Huawei is a top contender for the upcoming 5G auctions in Brazil, Chile, and Mexico. Although the company

repeatedly claims its independence from the Chinese state, it possesses an intentionally opaque corporate structure, and Chinese law requires that Chinese entities "support, assist and cooperate with state intelligence work." Accordingly, the United States is attempting to persuade countries in the hemisphere to reconsider adopting Chinese equipment. U.S. officials have warned countries that adopting Huawei technology would make information sharing and collaboration with the United States difficult, if not impossible. U.S. lawmakers have also introduced legislation to restrict intelligence sharing with countries that use Huawei equipment in their 5G networks. Additionally, Washington has offered economic incentives to tip the scale away from Chinese companies. For example, the United States offered Brazil, an erstwhile member of the "Clean Network," generous terms of finance to purchase 5G equipment from other (nonAmerican) sources. Unfortunately, Brazil reversed its initial decision on Huawei under threat of losing access to Chinese COVID-19 vaccines, demonstrating the leverage China has built over the region's largest economic power through its economic engagement.

Military Collaboration

Although Chinese engagement in Latin America is primarily economic, military collaboration is a growing aspect of Chinese activity in the region. Arms sales, military training, and technical military support allow the Chinese to build key strategic relationships with the armed forces of countries in the United States' shared neighborhood. The Chinese have sold equipment to military and police forces from countries historically opposed to the United States—such as Venezuela and Cuba—as well as close U.S. partners like Colombia and Chile. The People's Liberation Army (PLA) maintains a growing presence in the region through training and visits, which allows greater familiarity with countries' operational frameworks and preparedness, as well as their strategic doctrine. China has also focused on ongoing training of the region's military officers at PRC institutions of military education, which should familiarize and educate the upper brass in Chinese military doctrine. For instance, Venezuelan troops participated in China's "Clear Sky" exercises in November 2017.

Analysts debate how seriously Chinese military engagement in Latin America challenges U.S. influence in the region. Yet, it bears noting that the PLA is also rapidly building new dual-use infrastructure and acquiring access to existing dual-use infrastructure that can enhance its future military capabilities in the region. For example, China has several dozen agreements to build or expand deep-water ports, as seen most recently in El Salvador's ratification of infrastructure deals that will see a water purification plant and a port built along the country's Pacific coast. China also constructed a space station operated by the PLA in Neuquén Province, Argentina—without Argentinian oversight. While the Chinese claim this installation is for peaceful space exploration, the base has obvious dual-use potential as a tool for espionage. Ominously, China does not permit the Argentines to come near the facility. Likewise, China's growing partnership with Panama could eventually result in preferential access to the Panama Canal, facilitating the movement of goods and people in and out of the hemisphere and inflicting a symbolic as well as a strategic blow to the United States. Two-thirds of all ships transiting to and from the United States pass through the Panama Canal.

The growing interconnectedness of the Chinese and regional armed forces, combined with the already extensive Chinese economic and political leverage in the region, could increasingly create strategic challenges for the United States. In the case of a military confrontation between the United States and China, hemispheric dependence on Chinese economic, political, and military support could encourage (or force) Latin American countries to assist the Chinese—or at least withhold support to the United States. The PLA could use its increased presence in the hemisphere to gather intelligence on the United States or instigate a crisis that requires a U.S. response. Chinese leverage over countries in Latin America may also result in countries allowing the PLA to use its ports and other installations. Fortunately, China has yet to establish permanent military bases in the hemisphere, reducing its ability to operate without significant assistance or perform important military exercises in the region. And the scenarios raised in this paragraph

are projections of what could happen in the future if current trends continue. But they bear exploring because Chinese leadership likely envisions a military presence in the Western Hemisphere as a long-term investment to cash out later, as needed.

Soft Power

China is doing more than just developing its economic and military presence in the region. The Chinese are also applying soft power capabilities to make their burgeoning influence seem less threatening. Vaccine diplomacy is China's latest soft power play in the hemisphere. Even though the Chinese government's attempt to cover up the outbreak of COVID-19 assisted the virus in its spread worldwide, China is now repairing (and even enhancing) its reputation by providing personal protective equipment and vaccines to Latin American countries. Even Brazil, whose president is rhetorically hostile to China, has been left with no other option than to acquire China's Sinovac vaccine, lest Brazil be without a vaccine. And although Chinese officials claim that Beijing "never seeks geopolitical goals and economic interests" in exchange for vaccines, this does not appear to be the case. Shortly after initial talks on the possibility of Brazil receiving vaccines from China, Brazil announced the rules for its 5G auction, which allowed Huawei to participate—reversing earlier comments by government officials that seemed to favor barring the Chinese company and committing Brazil to the U.S.' "Clean Network" initiative. China also slowed its vaccine delivery schedule after a diplomatic spat between the president's son, Federal Deputy Eduardo Bolsonaro, and Chinese Ambassador to Brazil, Yang Wanming. Both are blatant attempts to use "vaccine diplomacy" to leverage strategic goals, with Huawei leading the way on China's potential espionage against the region.

A longer-standing soft power tool of the Chinese government is state-controlled media outlets. Xinhua, The People's Daily, and China Radio International all provide daily Spanish and Portuguese reporting. Similarly, China Central Television has a free, online 24-hour channel in Spanish, CGTN en Español. This latter station often attracts top commentators, including many U.S. think tank scholars. The magazine China Today also operates multiple websites in Spanish and even sells print copies in certain countries. These outlets have a robust social media presence in Spanish, including on websites China bans in its own country. Local news agencies often republish or cite these Chinese sources—multiplying the reach of their messages and amplifying their shares through social media algorithms.

Authoritarian Export

Linking many of these initiatives is a final— and critical—aspect of China's engagement in Latin America: efforts to export its authoritarian model and repressive technology. Authoritarian governments in the hemisphere—most notably Venezuela, Nicaragua, and Cuba—see China's combination of semi-market economy and repressive government control as a model to be emulated. The Chinese Communist Party actively aids these countries in this endeavor, thereby thwarting domestic efforts of political transition and regime change.

For example, Chinese telecommunications company ZTE has helped Nicolás Maduro regime develop a national identification card inspired by China's social credit system. This card, named "carnet de la patria" ("fatherland card"), tracks and stores its owner's information, such as family relations, social media presence, membership in a political party, and whether they have voted. This card is increasingly required for people to receive public benefits, including medicine, pensions, food, and subsidized fuel—and most recently, the ability to receive a coronavirus vaccine. (Of course, distributing scarce vaccines in Venezuela according to who possesses a "fatherland card" contravenes all epidemiological advice.) There are concerns that the Maduro regime uses these cards to reward loyalty and punish the opposition.

Chinese surveillance technology, including its "smart city" technology, has also proliferated to a number of illiberal governments or backsliding democracies in the region. For instance, under Rafael Correa in

Ecuador, China extended loans to build “smart city” technology, ostensibly aimed at curtailing street crime. However, surveillance footage was sent to the country’s feared domestic intelligence agency, including footage that compromised opposition political parties. While such potential is concerning for the region’s democratic future, so long as Latin America and the Caribbean continues to represent an outsized portion of global crime—that is, 8% of the world’s population but one-third of global homicides—there are likely to be sizeable markets for Chinese surveillance equipment.

A hemisphere where China is increasingly influential will also be a hemisphere in which autocracy is strengthened as democracy recedes and the tenets of the Inter-American Democratic Charter fade into irrelevance. Likewise, backsliding democracies, such as Nayib Bukele’s El Salvador, provide a strategic opening for China to assert itself in countries where U.S. influence usually has been strong. This is evidenced by the recent ratification of an “unconditional” infrastructure deal after the United States criticized the government for using its new parliamentary majority to remove five justices from its high court, as well as the independent attorney general.

CONTEMPORARY CHALLENGES: RUSSIA

Russian power is more limited and less multidimensional than China’s: Moscow occasionally undermines U.S. interests in select areas rather than consistently and across-the-board. Nonetheless, since the early 2000s, Russia has publicly expressed interest in expanding its presence in the region. Moscow’s 2016 Foreign Policy Concept of the Russian Federation proclaims: “Russia remains committed to the comprehensive strengthening of relations with the Latin American and Caribbean States taking into account the growing role of this region in global affairs.”

Most evidence suggests that Russia views its presence in Latin America primarily as a modest rejoinder to U.S. influence in Russia’s near abroad—a way of gaining strategic leverage on the United States and diverting its geopolitical energies. Contrary to China’s more robust efforts, however, Russia has circumscribed its activity and sought to expand its influence in the Western Hemisphere primarily with countries that have been historically opposed to the United States with regimes of an illiberal nature. (Unlike China, Russia has little to offer healthier, more politically stable and liberal states.) Russia has been actively involved with the states in the Bolivarian Alliance for the Peoples of Our America (ALBA)—most notably Venezuela, Cuba, and Nicaragua.

Military Assistance

Perhaps the primary way Russia supports Latin America’s illiberal regimes is with military assistance through arms sales, technical support, and military training and visits. Nicaragua serves as a prominent example. Russia provides practically all of Nicaragua’s armaments, many of which became key instruments of terror in Nicaragua’s 2018 uprising and President Daniel Ortega’s brutal suppression of it. (For example, Dragunov sniper rifles sold to the Nicaraguan Army ended up in the hands of well-trained paramilitary groups that used them to fire indiscriminately at protestors.) In 2014, the Russian military opened a training facility in Nicaragua, where numerous Russian military personnel are stationed— purportedly for joint military exercises and antitrafficking efforts, but possibly to aid Ortega’s efforts to suppress political opposition. A year later, Nicaragua permitted Russian warships access to Nicaraguan ports, and, in 2017, Nicaragua agreed to allow Russia to build a Global Navigation Satellite System station, conveniently stationed a short distance from the U.S. Embassy in Managua, that is likely used for intelligence gathering.

Russian military partnerships in the Western Hemisphere also allow Moscow to retaliate against U.S. involvement in Eastern Europe and perceived U.S. participation in so-called “color revolutions” on Russia’s periphery. For example, following the Russo-Georgian War of 2008 and increased NATO presence in Eastern Europe and the Black Sea, Russia sent nuclear-capable bombers to Venezuela for training exercises

and a warship to visit ports in Venezuela, Nicaragua, and Cuba. No doubt, the Russians were mindful of former President Donald J. Trump's various musings about the possibility of a naval blockade against Maduro's Venezuela. After the United States withdrew from the Intermediate-Range Nuclear Forces Treaty, Russia openly discussed the possibility of installing cruise missiles on Venezuela's Caribbean coast. Although Russia's ability to follow through on such statements is limited, Moscow presumably uses these maneuvers (and rhetorical flourishes) to demonstrate that it, too, can project power in its competitor's traditional sphere of influence.

Besides traditional military channels, Russia employs private military contractors to protect vulnerable Latin American regimes. For example, there are allegations that the Russian government sent the Wagner Group, an elite group of private military contractors with experience in Syria and Ukraine, to protect Maduro during Juan Guaidó's effort to force him from power. Such efforts serve to position Russia as a major player in any resolution of Venezuela's multifaceted crisis and constrain U.S. freedom of action by increasing the likelihood that any effort to remove the Maduro government would lead to a diplomatic confrontation with Moscow.

Disinformation & Propaganda

Disinformation and propaganda are also powerful and fine-tuned Russian tools. They allow Russia to manipulate public opinion and spread anti-western sentiment throughout the region—especially toward the United States. Russian state-owned news outlets have expanded their reach in Latin America with Spanish television and news networks such as Russia Today en Español and Sputnik Mundo. According to its website, Russia Today en Español reaches 18 million people a week in 10 different Latin American countries and has more than 3 billion total views on its YouTube channel. As with Chinese outlets, regional news organizations often republish many of these stories.

Russia pushes a familiar leitmotiv in the region: The need for a new multipolar world order, independent of the "imperialist" control of the United States. For example, Russian outlets fabricate stories about U.S. intentions to increase its military presence in the region. By playing off fears of U.S. interventions in Latin America, Russia endeavors to reduce the U.S. sale of military equipment to countries throughout the hemisphere.

Official media platforms are not the only channels Russia uses to advance its narrative and preferred policies. During multiple rounds of unrest across South America in late 2019, there was a marked increase in the number of Twitter accounts linked to Russia spreading destabilizing messages, such as encouraging violent protests in Chile and Colombia. There are also reports that Russia used similar tactics to influence presidential elections in Brazil and Mexico.

Financial Support and Sanctions Relief

In the economic realm, Russian trade with the hemisphere is not substantial. Nevertheless, Russia plays a significant role providing governments with financial support and helping them circumvent sanctions. Like China, Russia provides loans to friendly regimes with few strings attached and is flexible with repayment, including payment-in-kind (as it does with Venezuelan crude). In 2015, Russia extended a US$1.5 billion loan to Cuba (the largest since the fall of the Soviet Union) with a generous interest rate to build large power plants on the island. A mere year earlier, Russia excused 90 percent of Cuba's Soviet-era debt totaling over US$30 billion.

Russian assistance with sanctions evasion is critical for the survival of certain countries in the hemisphere, notably Venezuela. For example, after the United States imposed sanctions on Venezuela's state-owned oil company, Petróleos de Venezuela (PDVSA), Russia's state-owned oil company, Rosneft, continued to do

business with PDVSA. (The United States later designated Rosneft Trading and TNK Trading, the Swiss-based Russian subsidiaries in question in these endeavors, for sanctions.) Russia also appears to have been quietly involved with Venezuela's effort to design a national cryptocurrency, the petro, to help the Maduro regime avoid international sanctions. While the petro has been unsuccessful due to bureaucratic incompetency and lack of domestic and international enthusiasm, Russia will continue to aid its beleaguered ally in the effort to evade U.S. economic leverage.

Diplomatic Legitimacy

Russia also provides ALBA with diplomatic legitimacy and cover on the world stage. Putin and other high-level Russian officials frequently visit the Western Hemisphere to maintain contact with friendly regimes in the region. Between 2000 and 2017, 43 high-level Russian visits to Latin America took place—the majority to Cuba, Venezuela, and Nicaragua. Additionally, Russia's permanent seat on the United Nations Security Council (UNSC) gives it the ability to block the international community's efforts to hold governments in the region accountable for human rights violations or electoral fraud. Russia-led opposition, for example, has consistently blocked efforts by the United States and like-minded partners at the UNSC to restore democracy in Venezuela or criticize Ortega's human rights violations.

Diplomatic support flows both ways. By providing diplomatic cover for authoritarian governments in the hemisphere, Russia can obtain support for its revisionist policies closer to home. In 2014, numerous Latin American countries either voted against or abstained from a UN resolution that condemned Russia for its invasion of Crimea. Venezuela and Nicaragua were two of the few countries to support Russia and recognize Georgian breakaway regions following the Russo-Georgian War in 2008. Likewise, Bolivia, Cuba, and Nicaragua are among the few countries that recognize Russia's claim to Crimea.

Soft Power

Lastly, Russia is using vaccine distribution to expand its soft power capabilities in the hemisphere. Several Latin American countries have secured Russia's Sputnik V vaccine, which has an efficacy rate topping 90 percent. Bolivia, for example, procured Russian vaccines after citing difficulties and delays associated with acquiring Western alternatives, a common complaint from governments in the region. Following vaccine agreements between Bolivia and Russia, leaders of both countries discussed the possibility of increasing economic partnership between them in the natural gas, nuclear energy, and lithium mining sectors. Another country that has received the Russian vaccine is Venezuela. While the actual number of cases and deaths associated with COVID-19 in the country is unknown (with government reports almost certainly undercounting and obfuscating the figures), it is clear that Venezuela's health care system is in a precarious position. Russian vaccine diplomacy has further solidified Russia's place as one of Maduro's most important allies. Argentina is another country that has signed contracts for significant amounts of the Sputnik V vaccine.

CONTEMPORARY CHALLENGES: IRAN

Iran is another serious yet less prominent extrahemispheric player in Latin America. While it does not have China's and Russia's economic or military capabilities, it wields influence through friendly relations with several governments in the region and connections with myriad nonstate actors. Occasionally, these relations have proven capable of frustrating U.S. interests and, leveraging its network of non-state actors, threatening regional allies and U.S. national security with its participation in terrorism and illicit markets.

Like Russia, most of Iran's hemispheric allies are governments with strong anti-U.S. sentiment, especially ALBA members. Venezuela is Iran's closest partner in the region. As founding members of the Organization of the Petroleum Exporting Countries (OPEC), their partnership stretches back more than fifty years. The

relationship drew closer under President Hugo Chávez, who consolidated a block of ideological allies to oppose the United States, allowing the Iranians to build connections with other Latin American governments (with Chávez's blessing). More recently, the two countries have relied on each other to resist international pressure, especially as pressure from the United States has challenged their hold on power. Accordingly, Caracas and Tehran have supplied one another with the resources they desperately need. Venezuela provides hard currency in the form of gold bars to the cash-strapped Iranians in exchange for refined oil and food. Maduro has also shown interest in purchasing Iranian weapons as hostilities with the United States and neighboring Colombia intensify.

Another troubling trend is Iran's connection to non-state actors and proxy groups that operate throughout the region, especially Hizballah, which is deeply embedded with the illicit economy, including drug trafficking and money laundering. The group has been particularly successful in these endeavors in the Western Hemisphere, using Lebanese and Syrian diaspora communities to expand its reach and establish a connection with regional criminal organizations and government officials. Hezbollah has collaborated with drug trafficking networks in South America and Mexico and made millions of dollars trafficking drugs into the United States. Some of these earnings have been used to fund terrorism and even purchase weapons for Middle Eastern insurgents to employ against U.S. soldiers.

Iran-backed non-state actors have even managed to work with prominent government leaders in Venezuela. There are credible allegations that Tareck El Aissami, Venezuela's former vice president and current minister of industry and national production, was directly involved in providing fraudulent Venezuelan documents for Hezbollah members and sympathizers while in charge of the country's immigration office. Not only did this action permit Hezbollah members access to Venezuela, but it also provided them with passports they could leverage to travel visa-free throughout much of the region. The Venezuelan embassy in Iraq even sold such documents out of its official office. Furthermore, Adel El Zabayar, a former member of the Venezuelan National Assembly who worked closely with Maduro and other highranking Venezuelan officials, was charged in the United States for narco-terrorism involving the Cartel de Los Soles, the Revolutionary Armed Forces of Colombia (FARC), Hezbollah, and Hamas. El Zabayar was involved with trafficking cocaine into the United States and connecting the Cartel de Los Soles with Hezbollah and Hamas to recruit terrorists to carry out attacks against the United States.

Iran lacks the power to mount a major strategic challenge to U.S. influence in the Western Hemisphere. It can, however, increase instability and strengthen actors that threaten U.S. and broader regional interests.

TIPPING POINTS

While concerning, today's extra-hemispheric challenges to U.S. interests in the Western Hemisphere have not yet risen to the level of the Cold War or even the pre-World War II era. Yet, it is undeniable that the region is becoming a field of intensifying geopolitical contestation and that certain challenges—particularly the one posed by China—are likely to grow more serious over time, especially if left neglected.

So far, the United States has monitored these developments with concern, occasionally voicing its concerns publicly. But policy responses have been episodic and anemic at best. Part of this problem reflects the same resource limitations that have often hobbled U.S. policy toward Latin America outside times of acute crisis. But it also reflects the fact that the U.S. government has placed a lower premium on thinking strategically about the region since the end of the Cold War, no doubt owing to the favorable balance of power after the dissolution of the Soviet Union.

Looking ahead, the United States will need to identify developments that would begin seriously challenging its strategic denial policy or other critical U.S. interests in the region. That is the intellectual prerequisite to

formulating an effective response—and to have any chance to make a case for the additional resources needed to counter rivals' influence.

In our view, there are at least five scenarios that are: (a) eminently plausible, given the current trajectory of great-power rivals' actions in the Western Hemisphere, and would (b) rise to the level of a more serious geopolitical challenge— and in some cases, a strategic threat.

First, the balance of security influence in the region tips away from Washington as a growing number of countries in the Western Hemisphere seek military assistance from and security cooperation with great-power rivals instead of the United States. Extra-hemispheric actors are increasingly the go-to source for military equipment and assistance for several countries in Latin America and the Caribbean, as well as military training in both doctrine and strategy. This dynamic allows rivals to expand relations with countries close (geographically and ideologically) to the United States and shield friendly authoritarian regimes from domestic and U.S. pressure. Military assistance also increases the interoperability of weapons systems between great-power rivals and countries in the region. Over time, this trend could not only hamstring the pursuit of U.S. strategic goals but also provide strategic rivals a readymade excuse for a greater presence in our shared neighborhood. (Russia has justified its boots-on-the-ground presence in Venezuela, for instance, based on the need to service Russian weapons systems, per the contracts established by the original arms sales.) Closer ties between the Chinese and Russian armed forces and countries in the hemisphere might allow rivals to obtain valuable operational knowledge and training and assess the preparedness of regional armed forces that could be used during a potential conflict with the United States (or less likely, a partner country in the region). Furthermore, it may lead the region's armed forces—which have historically wielded significant political influence in their respective countries—to see Beijing and Moscow in a more favorable light. Lastly, the history of U.S.- led military training in the region could permit rivals to glean valuable information about U.S. military doctrine and command.

Second, a significant number of countries in the Western Hemisphere aspire to political and economic models that do not align with U.S. interests and values and even contravene the Inter-American Democratic Charter. Adopting China's economic and political model, i.e., a semi-market economy with near absolute state social control, could become an attractive option for countries facing poverty and social unrest. Both have increased in recent years, most recently owing to a regional economy buffeted by the COVID-19 pandemic. The (spurious) belief that China can put down domestic opposition and is bound to eclipse the United States economically may lend some modicum of credibility to the idea of adopting such a system. In the abstract, some governments may be attracted to the concept of a government able to concentrate and centralize power to "do big things" of a national character, especially in a region that has long suffered from weak institutions shot through with corruption. Here, too, the feeble nature of the region's state institutions, exposed during the current pandemic, may increase the attractiveness of rivals' political models. If a growing number of countries follow this path, it could lead to rapid democratic backsliding and economic policies unfavorable to U.S. interests and the many trade deals the United States maintains with the region. It could also accelerate adverse trends with respect to security relationships and military-to-military ties.

Third, regional indebtedness to extra-hemispheric rivals restricts freedom of action for countries in the Western Hemisphere and their ability or willingness to partner meaningfully with the United States. The growing economic dependency of countries in the hemisphere on great-power rivals for financing, especially China, may encourage (or force) them to side with extra-hemispheric actors during a potential conflict with the United States, or to at least withhold their support for U.S. strategic interests. Debt traps through predatory lending open the possibility that geopolitical rivals can extract concessions from countries in the hemisphere that are not in their (or the United States') best interest. The significant bind in which a country such as Ecuador currently finds itself illustrates what could become a reality on a region-wide scale.

Fourth, Western Hemisphere countries accept basing agreements, naval ports, joint airstrips, intelligence outposts, and other critical, potential dual-use infrastructure from great-power rivals. While the presence of Chinese and Russian military personnel and infrastructure projects in the hemisphere is growing, it is still limited in important ways. A more permanent, widespread, and extensive presence in close proximity to U.S. shores would give these rivals a strategic perch from which to challenge U.S. security and economic interests. The United States must be particularly attentive to dual-use technology or facilities already present in the region under the guise of peaceful objectives, especially some of the infrastructure contracts China has secured in the region. The aforementioned Chinese space station in Neuquén province, in southern Argentina, is a prime example. In the future, however, such dual-use assets might include (seemingly benign) dams, ports, waterways, highways, and bridges. Great-power rivals may seek to leverage these dual-use assets by converting them into military advantages. For now, this is a scenario that applies mainly to China and its terms of engagement in the Western Hemisphere, with Russia and Iran posing lesser challenges.

Fifth, extra-hemispheric rivals develop direct and operational ties with threatening non-state actors. Hostile non-state actors, including transnational criminal organizations or designated terrorist groups such as Colombia's FARC and National Liberation Army, threaten the national security of close regional allies. Extra-hemispheric actors may seek to establish direct ties to such groups by providing them with material support or fraudulent documentation so they can take actions that weaken or distract U.S. capabilities and resolve. The resources of major state rivals, combined with non-state actors' asymmetric capabilities, could advance their respective objectives in the region. To an extent, this has been visible with Iran's use and support of Hizballah cells in Venezuela and the "Tri-Border Area" of Argentina, Brazil, and Paraguay. However, it would be far more troubling if China or Russia displayed an interest and developed an ability to play a similar role in the region, as there are some scattered indications that Moscow may indeed be seeking to do.

PRINCIPLES FOR A U.S. RESPONSE

Geopolitics are back in Latin America, with great-power rivals seeking to use the Western Hemisphere for strategic leverage against the United States. The United States will need a long-term, strategic response. It appears the region will receive greater relative priority in U.S. policy: The Biden administration implicitly ranked the Western Hemisphere above the Middle East in its Interim National Security Strategic Guidance. Nonetheless, short of a major crisis, there is little likelihood that the level of resources the region receives will increase dramatically in the near term. With this in mind, we offer a few basic principles for a strategic response to the deterioration of American influence in the region that is mindful of resource constraints and the limits of what Washington can achieve within them.

First, track extra-hemispheric influence more systematically. The U.S. government will need a more complete cataloging of greatpower activity and presence in its shared neighborhood, as one recent bill before the U.S. Congress would require. Just as important will be establishing qualitative and quantitative metrics to monitor and evaluate the presence of its geopolitical rivals in the Western Hemisphere. Lacking such metrics, policymaking will continue to be conducted on an ad-hoc basis. Given the multidimensional nature of great power competition illuminated in this report, developing such measurements is not a straightforward endeavor. However, proximity and threat level (regarding both military and economic challenges to the United States) should be guiding principles in this effort to establish thresholds for greater action. In particular, the United States would be wise to systematically monitor the transfer of dual-use infrastructure and technology to the region and determine at what point such transfers would cross a critical threshold, presenting a point of significant strategic leverage against core U.S. interests.

Second, track vulnerabilities as well as strengths. The expansion of Chinese, Russian, and Iranian influence in Latin America and the Caribbean has not always been a popular phenomenon. Industries and enterprises

have been hurt by economic competition, and support for corrupt and illiberal regimes has tarnished the reputation of China, Russia, and Iran with some local populations. Heavy-handed vaccine diplomacy (with substandard quality vaccines and defective personal protective equipment to boot) could create further vulnerabilities for China in particular (and Russia, to a lesser extent). Studying which aspects of these countries' regional presence create diplomatic or soft-power vulnerabilities is a starting point for developing a more competitive response.

Third, engage on security issues of greatest concern to local governments and peoples. The United States must present itself as the preferred partner to help countries in the Western Hemisphere address their security concerns. In this regard, Washington has had some success in the past, with wide-ranging security assistance programs such as Plan Colombia and the U.S.-Mexico Mérida Initiative. In other cases, however, U.S. policy initiatives have focused on issues—such as curbing migration—of comparatively lower concern to regional partners. To compete effectively, the United States must also prioritize the preferred security challenges of its partners—and understand that those challenges are quickly shifting. The burgeoning threat represented by China's highly subsidized illegal, unregulated, and unreported fishing activities in sensitive ecological waters off the Pacific Coast of South America is but one example of the rapidly evolving nature of the region's security environment. The rise of disinformation and cybersecurity vulnerabilities throughout the region are other examples.

Fourth, counter the authoritarian playbook. While the presence of great-power rivals has often exacerbated political instability and furthered democratic backsliding in Latin America and the Caribbean, the truth is that preexisting political tensions, endemic corruption, and a poor record of governance in many countries throughout the region leave them vulnerable to Chinese, Russian, and Iranian influence. In the domestic context, there is a well-worn playbook that leads to authoritarianism, which includes electoral reengineering, suffocation of civil society and corruption of the media's independence, and the weakening of political opposition and political institutions, capped off by the politicization of judiciaries, military, and police forces. Sometimes leaders following the authoritarian playbook even consolidate their gains by amending or rewriting their country's constitution. Fortunately, the tools inherent in the Inter-American Democratic Charter can help sound a powerful warning against democratic backsliding and the authoritarian playbook. Maintaining the largely democratic nature of the region and focusing on improving the quality of governance and political institutions can reduce openings for the authoritarian playbook and limit opportunities for greatpower rivals to use backsliding democracies and nascent autocracies as convenient entry points into the hemisphere. Inevitably, however, these decisions will present difficult tradeoffs for U.S. policymakers, as pushing countries too hard on the quality of their democracy and governance could also open the door to Chinese and Russian influence.

Fifth, do not make it all about China. There is no question that U.S. interest in Latin America and the Caribbean rises when perceptions of extra-hemispheric threats become more acute. But just as the United States sometimes misfired during the early Cold War by focusing excessively on the dangers of communism as opposed to aspirations for local political and economic progress, it is a mistake to convey the impression that Washington cares about the Western Hemisphere only because of Chinese, Russian, and Iranian threats. Similarly, there are times when public critiques of Chinese, Russian, and Iranian policies by U.S. officials are entirely warranted, and Washington—as part of a larger turn to strategic competition—will need a more robust, focused bureaucratic capability in this area. Another lesson of the Cold War is that those critiques are often more effective when delivered by friendly local actors rather than the United States itself. For example, if the United States points out that Chinese COVID-19 vaccines don't work very well, it comes off as crass geopolitical point-scoring. If local actors in Chile or elsewhere make this argument, it is more likely to find a receptive audience.

Sixth, emphasize cost-effective means of competition. When resources are relatively scarce, the United States will need to find ways to increase the bang it receives for each buck. There are a variety of

possibilities. International Military Education and Training initiatives are an inexpensive means of building relationships with the next generation of Latin American military leaders—connections that the United States is in growing danger of not having in the future. Visits by high-level U.S. officials to countries that have not historically received much attention from the United States can also play an outsized role in warding off rival influence. Showing up does matter: Taiwan, for example, has used this sort of approach to maintain its diplomatic toehold in the region.

Seventh, leverage non-governmental advantages. Great-power competition encompasses more than just state action. This is where the United States can leverage asymmetric advantages. The United States has deep cultural, political, and historical ties with its southern neighbors, exemplified by the many immigrants and diaspora groups in the United States who hail from the region. These immigrants and their descendants have a deep sense of patriotism that rivals (and often surpasses) native-born U.S. citizens. Facilitating people-to-people diplomacy—by relaxing travel restrictions, expanding trade links, encouraging religious and university exchange initiatives, or pursuing professional development programs through public-private partnerships—can be a cost-efficient way for the United States to strengthen its hemispheric relationships and limit the influence of its great-power rivals.

Eighth, understand that you ultimately get what you pay for. Most analyses of deteriorating U.S. influence in Latin America and the Caribbean focus on the resource-poor approach Washington has taken in the region over the past 30 years and calls for a more holistic, better-supported strategy. We support this basic recommendation.

Most countries in Latin America and the Caribbean still see the United States as a preferred partner on many issues of concern and regret there are not more opportunities to engage with Washington on these issues. Defending U.S. interests in the region will indeed require a whole-of-government effort to provide countries in Latin America and the Caribbean with alternatives to economic, diplomatic, and military reliance on extra-hemispheric rivals in investment, 5G telecommunications, strengthening governance, pushing for greater transparency (in development and other projects), and highlighting the predatory aspects of China’s advance, while not appearing to block countries from taking advantage of the trade and investment resources Beijing can offer. In the coming years, the United States will likely need to pursue competition on a strictly limited budget. But if it does not make greater preventive investments in the region now, it may once again experience the historical pattern of having to make far greater compensatory investments once key tipping points have been reached and emerging strategic challenges have become impossible to ignore.

10. The Changing Nature and Implications of Russian Military Transfers to China

21.06.2021

CSIS

https://www.csis.org/analysis/changing-nature-and-implications-russian-military-transfers-china

Executive Summary

Russian-Chinese military transfers have increased sharply since 2015. These have been highlighted by a series of important arms transactions, including landmark contracts in 2015 for the sale of Su-35 combat

aircraft and S-400 air defense systems worth $5 billion, followed by a series of important transactions involving the transfer of helicopters, submarine technology, and aircraft engines. Joint technology projects have been especially important due to their expansion into new areas such as missile defense, taking on greater strategic importance. Together with an increase in combined exercises, joint air patrols, and key leader engagements, the resumption of large-scale arms transfers has contributed to a growing military convergence between Russia and China while enhancing their strategic partnership. These transfers are also advancing China's military expansion in the western Pacific, helping to tilt the regional balance more in China's favor.

Alongside these notable signs of progress, however, there are contrary signs as well, indicating that bilateral arms trade is considerably more complicated for Russia. For one, Russia had to relax strictures on the transfer of advanced military systems and technology to revive arms trade with China after a decade-long slowdown starting in 2006. Likewise, Russian arms sales are giving way to technology transfers, raising costs for Russia in terms of future export revenues as China seeks to advance its defense industry. China's reverse engineering practices have also continued apace, further eroding Russia's technology lead over China, whose arms exports have made further inroads into Russian arms markets. In sum, the recent upgrade in military relations has come at a significant price for Russia. To offset these losses, the Kremlin will have to find ways to tap into China's growing technology base to sustain its defense industry, or eventually it may find itself at a growing disadvantage in future arms dealings with Beijing.

The Resurgence of Russian Arms Sales to China Post-Ukraine

The resumption of large-scale arms transfers in 2015 was an important development for bilateral military relations, marking the beginning of a new phase in military-technical cooperation. The signing of the S-400 and Su-35 contracts also marked the end of Russia's long-standing policy of withholding sales of its most advanced weapon systems, since these two systems are currently the best Russian systems in their classes, even though Russia is currently developing more advanced systems. Although additional arms sales have been few and far between, the recently announced sale of Mi-171 combat helicopters demonstrates that arms sales are likely to continue to play a role—albeit a more limited one—in military-technical cooperation.

The growth of technology transfers has been even more important for bilateral military relations, having increased in scale and expanded into new areas. According to Rostec executive Viktor Kladov, Russia is cooperating with China on the development of weapons for land, air, and naval use. In addition, technology cooperation has taken on greater strategic importance, as exemplified by their recently announced joint early warning system project—their first joint strategic weapons project since the early Cold War. Moscow and Beijing have also been stepping up cooperation on artificial intelligence and space technologies.

At the same time, military relations have been further institutionalized with the signing of a new roadmap for military cooperation in 2017. The two sides are also reportedly discussing a new defense cooperation agreement, which may be signed in the near future. Collectively, these recent actions have led to a sharp increase in Russian arms sales revenues, which are currently averaging around $1 billion per year according to the Stockholm International Peace Research Institute (SIPRI). Yet SIPRI's numbers likely understate actual revenues by a substantial margin, as they do not reflect pending deliveries under existing contracts, most notably from the S-400 sale, nor do they reflect amounts received under the many joint projects undertaken in recent years.

What do these transactions tell us about the current state of Russian-Chinese military-technical cooperation? For one, they tell us that the two countries have succeeded in restoring a vibrant, diverse, and increasingly important arms sales program since 2015. This is clearly reflected in the enhanced level of arms trade since 2015, which contrasts with the state of trade over the prior decade, a period of relative

decline. Between 2006 and 2014, revenues averaged just over $600 million per year, well below current levels, and even these modest levels were only sustained through sales of aircraft engines, components, and occasional helicopter sales, as the two failed to conclude a major new arms sale agreement over this 10-year period.

The turnaround in Russian-Chinese arms sales can be attributed to decisions taken by Presidents Putin and Xi in 2012 to restore arms trade as a central pillar of their relationship. To do so, the two sides had to first resolve Russian concerns over Chinese intellectual property theft and latent security concerns over China's rising military power, as well as Beijing's frustrations over Moscow's reluctance to transfer advanced weapons to China. Spurred by the Ukraine crisis, Russia ended up making most of the compromises, accepting more risk by relaxing strictures on the transfer of advanced Russian military technologies.

This decision was taken primarily for geopolitical reasons, as Moscow was anxious post-Ukraine to secure Chinese economic and diplomatic support to counter Western efforts to sanction and isolate Russia. Moscow also sought to maintain its preeminent position in China's lucrative arms markets. For its part, China made only modest concessions, signing new intellectual property agreements and agreeing to purchase Russian weapons in larger volumes. Yet, this basic compromise set the stage for a major upgrade in arms transfers starting in 2015, and it remains an important factor in sustaining its development.

The surge in recent arms transactions also reflects the continuing importance of bilateral arms trade for both countries. For Moscow, the desire for additional revenues continues to drive Russian military sales to China. Global arms sales revenues currently account for around 31 percent of the Russian defense industry's total budget, while China remains one of Russia's two most important arms clients (the other being India), with $37 billion in total arms sales since 1992 according to SIPRI. Moreover, China's market is fast becoming even more important for Moscow as it finds itself increasingly cutoff from its traditional markets due to the growing threat from U.S. CAATSA sanctions on countries buying weapons from Russia. By contrast, China remains one of the main countries still willing to deal with Russia in spite of the CAATSA threat.

For China, the sheer number of recent transactions confirms that Russian military systems and technologies remain attractive for Beijing despite recent advances in China's defense production capabilities. They also confirm that Moscow continues to hold an edge over China in several important defense areas. This is reflected in China's recent arms purchases, such as the Su-35 purchase, which provided access to advanced Russian radar systems, aircraft engines, and avionics at a time when China is struggling to develop its own fifth generation aircraft. Likewise, access to Russian submarine expertise and technology will help China to overcome enduring deficiencies in hull design, quieting technologies, land attack, and automation.

At the same time, China has become increasingly selective in its acquisitions from Russia, as it continues to transition from Russian platform purchases to transfers of technology in a bid to achieve greater self-sufficiency in defense production. Recent sales indicate that China remains willing to buy platforms from Russia but mainly as a stopgap measure to fill critical capability gaps. For example, China's acquisition of Russian S-400 air defense systems was taken to fill gaps in long-range air defense, while giving China access to a platform it can copy to advance its own air defense production capabilities.

As a result, Moscow has had limited success in concluding further arms sale agreements with China, despite several recent Russian overtures, as China continues to pursue the underlying technologies. For the same reason, repeat sales are increasingly rare as well. China's 2019 decision to acquire an additional 100 Russian Mi-171 transport helicopters is thus far the only notable exception, reflecting one of the few areas in which China is still struggling to develop suitable systems of its own. This too is starting to change as China has begun decommissioning its older Mi-171s in favor of the new Chinese Z-8G and Z-20 helicopters. Beijing is still heavily reliant on Russian aircraft engines, however, due to the great difficulty of

reverse engineering advanced turbofan engines. Thus, additional purchases in this area remain likely as well.

By contrast, technology transfer has become increasingly predominant in bilateral relations, and this trend is likely to continue given China's strong desire to advance its own defense production capabilities. Such transactions also tend to be fairly one-sided in nature, emphasizing transfers of Russian technology to China, with little going back to Russia. This is typically true as well of the so-called "joint development" projects. The recent "joint" heavy-lift helicopter project is a good example, as Russia's role has reportedly been relegated to technical support and the provision of a transmission and tail rotor, even though it is reportedly transferring its core Mi-26 design technologies to China. Chinese chief designer Wu Ximing recently admitted as much, stating that "Our goal . . . is to learn from Russia's strong points [in transmission design] and close the gap." So far, the same could be said of the early warning system, since Russia has been officially awarded just a single contract for software development, although it is reportedly providing technical assistance on space control issues and possibly other aspects of the system as well.

Despite recent successes in reviving Russian-Chinese arms transfers, trade between the two remains subject to certain enduring limitations. Most notably, Russian concerns over Chinese reverse engineering practices have hardly disappeared. A Rostec official recently reported on over 500 cases of Chinese intellectual property theft from Russia over the past 17 years. Concerns over China's expanding role in the global arms markets are growing as well. To address these challenges, Russia continues to deliver scaled-down export versions of its most important weapon systems, while reserving the most advanced versions for its own armed forces. Russia also still refrains from transferring its most sensitive technologies to China. For example, Moscow has thus far declined to transfer Russian RD-180 rocket engines. Likewise, there are strong indications that it would withhold sale of the Iskander missile despite Chinese interest.

Arms transfers are also constrained by Russia's lingering concern over the dangers of arming a potential future adversary. This explains Russia's tendency to preference transfers of defensive systems, such as the S-400 air defense system and early warning system technology. While China could conceivably employ previously transferred Su-35 Flankers and Kilo submarines against Russia, they would hardly prove decisive in a future military conflict. Moreover, China has chosen instead to integrate such systems into its counter-intervention strategy, which is aimed squarely at the United States, rather than Russia. By contrast, Russia has refrained from sales of ground combat systems, strategic bombers, and land-attack missiles, offensive weapons that would more fundamentally threaten Russia.

Russian arms transfers are also limited to some extent by concerns over Chinese competition on global arms markets. Increasingly, Beijing is selling Chinese weapons based on Russian technology to existing Russian and Chinese clients. Examples include recent sales of HQ-9 SAMs to Turkmenistan and Yuan-class submarines to Pakistan; the former is based on Russia's S-300, while the latter appears to draw partly on Russia's Kilo submarine. Yet, Chinese arms exports are less of a concern for Russia, since they are still targeted mainly at the low end of the market. Chinese arms sales are also tempered by Beijing's continuing dependence on Russian aircraft engines and advanced technologies, which limits all-out competition with Moscow.

The growing number of espionage cases brought against Russian citizens for sharing state secrets with Chinese intelligence provides further evidence of Russia's reluctance to transfer highly sensitive military technologies to Beijing. These include a spate of recent cases brought against Russian scientists, such as Valery Mitko, head of the Arctic Academy of Sciences in St. Petersburg, who was charged with sharing Russian submarine technology with China, and Russian space scientist Vladimir Kudryavtsev, who was convicted of sharing technical details on Russian spacecraft. A 2018 report by Team 29, a Russian lawyers watchdog group, noted that China has been implicated in 17 cases of this kind over the past two decades, falling just short of the 18 cases brought for sharing secrets with the United States. Ironically, the recent

uptick in cases is driven in part by the Kremlin's push for closer ties with China post-Ukraine, which has led to increased engagement between Russian and Chinese specialists. Yet, these cases also demonstrate that significant limits remain on Russia's willingness to transfer sensitive military technologies to China.

Impact of Sino-Russian Arms Transfers on the Western-Pacific Military Balance

Despite such limitations, the recent resumption of Russian military transfers to China is likely to have a substantial impact on the military balance in the western Pacific, tilting it more in China's favor. Putin himself has recently noted how Russian military technologies are bolstering China's defense capabilities. Each system contributes in its own way to bolstering Chinese power. For example, the 24 Su-35 Flankers purchased from Russia, which are now deployed at bases in southern China, have extended Chinese air power well out into the South China Sea. The Su-35 stacks up quite favorably against U.S. fourth generation fighters and can outmaneuver them as well due to its advanced thrust-vector engines. They are no match, however, for the U.S. F-22. Moreover, there is only so much that a single Su-35 squadron can do to impact the regional military balance.

China's new S-400s will have a significant effect on the balance by virtue of their extended range (400 km) and high performance. China has reportedly purchased six battalion sets of the S-400, a quantity sufficient to provide a substantial boost for Beijing's integrated air defense system. Deployed near the coast, these systems would extend the reach of China's air defense network well out into the East and South China Seas, potentially covering much of Taiwan in the process. Posted near the border with India, the S-400 could threaten Indian aircraft well into its northern provinces.

The recent purchase of Mi-171H multirole helicopters will enhance China's ability to conduct air mobile and maritime expeditionary operations. They are also capable of operating at higher altitudes, an important factor in future border clashes with India. The purchase of additional Russian turbofan engines will allow China to continue building out its military transport fleet, while keeping its J-10 fighters and H-6K medium-range bombers operational. The J-10 is an important component of China's air force, while the H-6K allows China to conduct cruise missile strikes out to the second island chain.

Russian arms and technology transfers will have an even greater impact on the balance over the medium to longer term as joint development projects are completed. By the early 2030s, China's new heavy-lift helicopter will provide a formidable long-range transport capability to support Chinese expeditionary operations. With a range of 630 km and a top speed of 300 km/hour, China could use this helicopter to rapidly transport troops and materiel as far away as Taiwan, the Senkakus, and the disputed Paracel Islands.

Likewise, development of a new conventional submarine would significantly boost China's anti-access capabilities. While few details were provided about this new system, Chinese conventional submarines still lag behind current Russian designs in terms of their quietness, degree of automation, and advanced weapons and sensors, even though China leads Russia in air independent propulsion. Assuming Russia shares this technology, a fleet of quieter, better-armed, and more capable Chinese multirole conventional submarines would pose a significant challenge for U.S. and allied forces in the western Pacific by threatening choke points and conducting standoff missile strikes against land and naval targets, given proper intelligence, surveillance, and reconnaissance (ISR) support.

Similarly, although still a long way off, development of an effective Chinese ballistic missile early warning system would significantly enhance China's strategic security by making it more difficult for the United States and its allies to launch prompt missile strikes against Chinese fleeting and high value targets using theater or strategic ballistic missiles. An early warning system would also allow China to adopt a launch-on-warning posture for its strategic nuclear forces, further strengthening China's deterrence posture.

Over the longer term, transfers of advanced Russian military technologies are likely to have important second order effects on the western Pacific balance. Once mastered, the latest Russian technology will further Chinese development of a generation of even more advanced Chinese air defense systems, conventional submarines, combat aircraft, and assault helicopters. Collectively, when coupled with existing Chinese capabilities, such systems will help China to further press its advantages in the western Pacific.

It is important to recognize, however, that acquisition of Russia military technology is only one component of a deep and well-financed technology acquisition strategy designed to transform China into a military superpower. Indigenous innovation and civil-military fusion fueled by access to advanced foreign dual-use technologies are even more important components of this long-term strategy. Through such programs, Beijing is essentially looking to rely increasingly on internal innovation, while further reducing its dependence on Russian military platforms and technology.

Conclusion

The resumption of a vibrant and expansive defense transfer program has been a major achievement in Sino-Russian relations, reflecting a qualitative improvement in military cooperation. Coupled with a sharp increase in combined military exercises, joint air patrols, missile defense drills, and key leader engagements, defense cooperation between the two countries has become once again a central pillar in their expanding strategic partnership. Enhanced military relations, coupled with growing trade and energy ties and geopolitical cooperation, have in turn contributed to a growing strategic convergence between Russia and China. No wonder Putin claimed that Russian-Chinese relations have reached unprecedented levels.

Recent developments would also appear to validate Putin's decision post-Ukraine to assume greater risks in its dealings with China by making further concessions on the transfer of advanced weapons and technology. By doing so, Putin has succeeded in reviving Russian arms transfers and establishing close military ties with Beijing while forging an increasingly close strategic partnership targeting the West. Moreover, having wagered its security on maintaining close ties with Beijing, the Kremlin has succeeded in reducing the possibility of conflict with China at least for the foreseeable future. At the same time, Moscow has been able to secure its strategic rear, leaving it free to focus on its ongoing conflict with the West and its growing involvement in the Middle East.

Yet, despite these notable gains, Moscow's growing alignment with Beijing carries significant costs for Russia. For one, traditional arms sales are becoming increasingly tenuous. Notably, following the two major sales announced in 2015 (Su-35, S-400), the next major arms sale wasn't announced until 2020 (Mi-171H), nearly five years later. Moreover, this trend looks increasingly irreversible, as rapid Chinese advances have undercut Russia's former strategy of selling China its "second-best" systems while keeping a generation ahead in weapons development. Instead, technology transfer and joint development projects will increase in importance, and as this process unfolds, Russia's remaining technological lead over China is likely to erode even further. Although the Kremlin tends to downplay such risks, the consequences for Russia in terms of lost military technology and export revenues will be significant. Absent fundamental changes in global alignments, Russia's best hope for mitigating these unfavorable consequences is to gain greater access to Chinese commercial and dual-use technology, which would help both to sustain its defense industry and develop a more innovative economy. Pursuing closer defense industry ties with China is another possibility, although so far mutual efforts in this area have been limited due to persistent technological nationalism on both sides. The recent increase in cooperation on the development of civilian and dual-use technologies provides some cause for optimism for the Kremlin, although Russia's access to Chinese military technology remains limited. Whether Russia can navigate these challenges without becoming overly dependent on China remains to be seen.

Finally, it should be noted that Moscow's growing military ties and increased arms transfers to China have had other important consequences for Moscow, complicating Russia's relations with other countries in the Indo-Pacific region, including longtime partners India and Vietnam. Driven partly by concerns over China's rising military power, for example, India has been diversifying its military relations in recent years, both through its active participation in coalition-building against Beijing through the Quad and increased arms purchases from the United States, France, and Israel. As a result, Russia has lost its predominant position in India's arms market and must now compete more vigorously to preserve its remaining market share. Likewise, Russia's dominant position in Vietnam's arms market has come under pressure in recent years due in part to Hanoi's concerns over Russia's strengthening military ties with China. As a result, Hanoi has recently upgraded military relations with the United States while exploring new arms purchases as well.

Despite these unfavorable developments, Moscow has thus far been able to maintain its status as India's leading arms supplier, as evidenced by a series of new orders placed by India during the 2019–20 timeframe. Likewise, Vietnam continues to buy arms from Russia, such as the recent purchase of 12 Yak-30 combat aircraft/trainers in 2019 for $350 million. By contrast, Hanoi has yet to make a substantial purchase of new military systems from the United States, despite their growing military dialogue. The fact remains that the large installed base of Russian weapons systems maintained by India and Vietnam coupled with these countries' desire to avoid overdependence on other countries virtually ensures Russia an important role in both countries' arms acquisition programs, at least for the foreseeable future.

11. Missile Defense is not a Substitute for Arms Control

25.05.2021

War on the Rocks

https://warontherocks.com/2021/05/missile-defense-is-not-a-substitute-for-arms-control/

President Ronald Reagan had a dream of an impregnable shield that could swat away nuclear-tipped missiles like flies. Mikhail Gorbachev saw that as a nightmare. He feared that America's missile defense system would leave Russia no option but to develop more and more nuclear weapons to overwhelm that shield. Fast forward to 2021 and $400 billion in missile defense funding later, U.S. advocates of missile defense still do not have a reliable missile defense system. However, Gorbachev's heirs in the Kremlin are acting on their threat to build more and newer nuclear weapons as protection against the event, however unlikely, that the United States fields a missile defense system that could neutralize Russia's nuclear arsenal.

The United States and Russia are at a critical juncture, and the next steps will determine whether the two countries escalate the arms race or chart a more stable path. Joe Biden extended the 2010 New Strategic Arms Reduction Treaty (New START) in one of his first acts as president, preserving the last treaty capping the nuclear weapon stockpiles of the two largest nuclear powers. Analysts have rightly begun asking, what comes next? Further steps to diminish the danger of nuclear war by addressing — in a future agreement — cyber threats to nuclear command, control, and communication or space-based systems would be desirable. However, these efforts have been stymied by Russian President Vladimir Putin's insistence that U.S. missile defenses be part of the talks, and America's insistence that nonstrategic nuclear weapons be on the table.

One recent commentary in *War on the Rocks* framed the question of discussing missile defenses in the next round of strategic talks as whether the United States should unilaterally place limits on its missile defenses "to entice Russia — which publicly opposes U.S. missile defense plans — back to the negotiating table." In addition, the author argued that "[t]he problem with offering to limit U.S. missile defense plans up front is that it allows Russia to use missile defense as a point of leverage in the talks." This framing misses the mark. First, any unilateral limits on missile defense — particularly if they are unverified — would not address Russia's long-term grievances with the program. Showing a willingness to discuss Russia's concerns, however, could be an element of a practical approach to try to get Russia to put its own destabilizing technologies on the negotiating table as well.

Demonstrating an openness to including missile defense in strategic stability talks is actually a point of leverage for the United States. Russia has evinced little interest in further arms control in recent years, except where controls would apply to technologies it does not possess, and an openness to dialogue on something Moscow cares about may provide a way to unlock the door to progress.

As the Biden team prepares for a proposed summit with Russia in the coming months, signaling that the United States could be willing to discuss missile defense would put the United States on the front foot going into talks.

Both Russia and the United States Want More on the Table

In recent years, Russia and the United States have blamed each other for the breakdown in arms control. Moscow argues that America's withdrawal from the Anti-Ballistic Missile Treaty in 2002 forced Russia to develop more weapons and newer weapons, like hypersonics, in response. Washington, naturally, blames Moscow. The Trump administration sought to extend New START for one year and to place a cap on warheads. When that failed, then-national security adviser Robert O'Brien said, "We hope that Russia will reevaluate its position before a costly arms race ensues." Despite serious philosophical disagreements on the role of arms control, the Obama, Trump, and Biden administrations agree on the need to address issues New START did not. Upon the five-year extension of New START, Secretary of State Antony Blinken said that the United States will use the time to pursue "arms control that addresses all nuclear weapons."

This announcement reflects a consensus in Washington that the next agreement with Russia should seek to address nonstrategic nuclear weapons (shorter-range delivery systems with lower yield warheads for use on the battlefield), which make up a small portion of the U.S. arsenal (around 500 warheads) and make up a significant percentage of the Russian arsenal.

Russia has made clear that this is exactly what will *not* happen while the United States refuses to talk missile defense. To some extent, this may be a convenient excuse to avoid reducing some of the remaining trappings of Soviet power by demanding a unilateral concession. There is, however, room to maneuver. While Moscow has explicitly linked its participation in future arms control discussions to U.S. willingness to discuss missile defense, there should be no assumption that discussing missile defense is the same as offering to unilaterally limit missile defense. The way forward for the Biden administration should be to indicate a willingness to discuss and respond seriously to Russian concerns that its deterrent could be put at risk. While current plans to develop a layered missile defense system could not conceivably threaten Russia's deterrent, ignoring Russia's concerns about a long-term threat would also play into Moscow's hands.

Incorporating Missile Defense in Future Arms Control Agreements

Currently, New START allows no more than 1,550 deployed strategic nuclear warheads on intercontinental ballistic missiles, submarine-launched ballistic missiles, and heavy bombers equipped for nuclear armaments (each such heavy bomber is counted as one warhead toward this limit). These limits have been verifiably met for a decade and can finally be used as a foundation for one of the treaty's original purposes: to provide a new start to future arms control.

Moscow — and Beijing for that matter — are legitimately concerned about U.S. missile defenses' future expansion. While U.S. missile defenses are meant to protect against long-range missile threats from North Korea or, maybe in the future, Iran, efforts to stay ahead of rogue-state threats are pushing the technological envelope toward capabilities that, if ever perfected, might threaten Moscow or Beijing's confidence in their nuclear deterrents. However, it will be years before technologies that would be of real concern to Russian and Chinese deterrents are even adequately tested, and then still more years to full development if they were ever proved reliable.

As a first step to restore some trust in the bilateral relationship, Russia and the United States should commit to publicly explaining the role of missile defenses in their nuclear deterrent strategy, and emphasizing that their missile defense systems do not target the other. This basic understanding is not as clear to both parties as one might assume. Trump muddied the water over the role of missile defenses in U.S. strategy when he announced the 2019 *Missile Defense Review* saying, "Our goal is simple: to ensure that we can detect and destroy any missile launched against the United States — anywhere, anytime, anyplace." Presumably, this opened the door to using missile defense to defeat Russian missiles. These concerns have been amplified since the phrase "strategic stability" was stricken from the review, and Congress has given the president even more flexibility to inflame tensions with nuclear adversaries by eliminating the legislative language committing the United States to seek only protection against limited (meaning rogue state or accidental) strikes. Acknowledging that missile defenses do not target Moscow could go a long way to buttress strategic stability.

The Anti-Ballistic Missile Treaty was in essence an admission that the concept of missile defense is in itself destabilizing and likely to lead to an arms race. Still, if the United States is unwilling to abandon its expensive folly, there are some who posit that development in cooperation with adversaries could mitigate such danger. The U.S. National Academy of Sciences and the Russian Academy of Sciences recently published a joint report on the technical feasibility of ballistic missile defense cooperation. The report finds that "far from being destabilizing, cooperation on BMD [ballistic missile defense] may help improve overall strategic stability" and "some forms of cooperation are technically feasible, militarily beneficial to both countries, and a threat to neither." The key recommendation from this joint effort: "The United States and the Russian Federation should establish, as soon as political conditions permit, joint information sharing of missile defense data from satellites and ground-based radar systems through a dedicated information-sharing center." While this idea may seem idealistic in the current political climate, it is not dead on arrival.

Representatives from both countries plan to meet in "the coming weeks" to discuss a U.S.-Russian summit. Further, the paperwork to implement such an arrangement was actually drawn up in 1998 between Presidents Bill Clinton and Boris Yeltsin. Any future cooperation could be modeled on the proposed Joint Data Exchange Center, which could share militarily significant data on detecting and tracking of third countries' ballistic missiles. Cooperation could be feasible as joint U.S.-Russian and NATO-Russian command post computer-based exercises were conducted even after the U.S. withdrew from the Anti-Ballistic Missile Treaty. Dialogue on this issue would also allow Moscow to express its concerns about U.S. plans and remove a barrier to serious arms control discussions.

Time to Seize the Moment

The United States might be able to get Russia to discuss nonstrategic nuclear forces without bringing up missile defenses — but it's highly unlikely. The Trump administration tried that approach and came up empty-handed. As recently as May 17, Russian Foreign Minister Sergey Lavrov repeated Moscow's position, arguing, "Everything that affects strategic stability (nuclear and non-nuclear arms, offensive and *defensive weapons* [italics added]) must be on the negotiating table. The Americans know our approach."

The Biden administration should not give Russia an excuse to walk away from the negotiating table by refusing to discuss missile defense. There's no time to lose — the White House has a few years to try to negotiate an extremely complex arms control agreement and figure out how to verify it. By demonstrating an openness to addressing missile defenses in strategic stability talks, the United States will remove one of Putin's pretexts to evade serious negotiations with the Biden administration. This posture will put the United States in the driver's seat.

12. Russia's Ambitious Military-Geostrategic Posture in the Mediterranean

10.06.2021

Carneggie

https://carnegieeurope.eu/2021/06/10/russia-s-ambitious-military-geostrategic-posture-in-mediterranean-pub-84695

The Mediterranean is a significant component of Moscow's military strategy: the basin provides an access point to southern Europe, the Middle East, and North Africa. In the eyes of the Russian elite, the Mediterranean is also an arena of great power competition with the United States and NATO. Through a smart buildup of naval and anti-access/area denial (A2/AD) assets, as well as through clients like the Syrian Arab Army, the Kremlin strives to counter NATO's presence in the region and protect Russia's southern flank. Given the hardship facing Russian defense economics and the poor shape of the country's shipyards, Moscow's power-projection agenda in the Mediterranean is a far more realistic and effective strategy for the Russian Navy than the pursuit of a global blue-water posture to challenge U.S. naval supremacy.

In line with the grand design and geopolitical worldview of Russian President Vladimir Putin, Russia's military leadership has rigorously established a robust and ambitious strategic posture in the Mediterranean. Within a decade, Russia has emerged as a challenger on Europe's southern flank. In Syria, Russian deployments have set up an A2/AD bubble over the Levant. The Syrian frontier has greatly helped the Russian Armed Forces develop combat-proven capabilities and test over 200 new weapons. Russia's infamous arc of steel now extends to the Mediterranean and poses a potential threat to NATO's freedom of movement in this important region. In Libya, a mixture of Russian Aerospace Forces and private military contractors (PMCs) have equipped the Kremlin with considerable geopolitical leverage.

THE RUSSIAN MILITARY'S COMEBACK AFTER THE POST-SOVIET FALL

The Kremlin's geostrategic calculus in the Mediterranean overlaps with a Soviet-type resolve based on a comprehensive framework that prioritizes spheres of influence and alliances with client states. Since the rapid collapse of the regime of former Libyan leader Muammar Qaddafi in 2011, Moscow has shown a firm

willingness toward military interventions in the Mediterranean to safeguard its clients. Syria is the manifestation of this political-military understanding.

In a way, therefore, Russia's campaign in Syria since September 2015 has been an effort to recover lost ground after the Kremlin's miscalculation in Libya. This calculus is essential to grasp the lines that the Russian leadership draws between its Syrian and Libyan portfolios. The Russian authorities have been heavily critical of the 2011 UN-backed Western intervention in Libya. Moscow believes that Western powers misused UN Security Council Resolution 1973, which Russia supported, to undertake regime change in Libya.

In a broader sense, however, the Syrian campaign—and the Mediterranean expedition in general—is about a larger geopolitical gambit: the rise of the Russian military after the collapse of the Soviet Union.

In the 1990s, Russia's post-Soviet military faced the dramatic decline of its doctrinal order of battle, combined with budgetary, combat-readiness, and personnel setbacks. More importantly, immediately after the Cold War, there was an undeniable ambiguity with respect to the Russian Armed Forces' role as Moscow struggled to determine its—and its military's—place in the world. Russia had cut military expenditure drastically during a decade of post-Soviet economic turbulence. The fielding of new weapons systems slowed and even halted altogether in some cases. Russian military formations lacked financial resources and even fuel to keep their combat edge. Intelligence reports suggest that wages were often months in arrears, combat readiness was at a minimum for most formations, and, more significantly, the armed forces' popular image was extremely poor. In the mid-1990s, the First Chechen War showcased these difficulties for the Russian military.

While the 2008 Russia-Georgia War hinted at some comeback success, the Russian military was still underperforming. Although Moscow successfully reached its strategic goals in that conflict, there were critical shortfalls in tactical engagements, logistics, and operational art.

Within Moscow's comprehensive framework, a key objective of the Russian forward presence in Syria relates to efforts to develop military capabilities in a larger geopolitical context. In other words, the Syrian expedition has always been about translating military lessons learned in the Levant into improvements in the armed forces' overall combat capabilities. This is why the Kremlin's Mediterranean strategy is not only about the Mediterranean region.

Russian analysts emphasize certain pillars of the Syrian expedition. Moscow has managed to build what one think tank scholar has called a "very productive symbiosis" between its expeditionary forces and Syrian Arab Army formations. According to Russian experts, the capabilities of the Syrian regime's combat formations have been considerably bolstered. These efforts include the establishment of whole new Syrian military units, such as the Fifth Assault Corps. Another important aspect is the systematic incorporation of PMCs—mostly well-paid retired Russian security servicemen—into major operations, rather than support roles.

Syria has also served as a testing ground for the Russian military's warfare conduct, weapons systems, and concepts of operations. Open-source intelligence reports suggest that Russia's defense leadership has sent "every military district commander and several other key generals" to command the Russian deployment in Syria for a minimum of six months each. This means that every Russian military district is now led by an officer with at least six months' experience commanding forces in combat—a major learning opportunity that Moscow could not have achieved without its deployment in Syria.

This practice extends to the operational and tactical echelons of the Russian military. As of October 2018, some 63,000 professional Russian officers and contracted personnel had completed at least one tour in

Syria. Although this figure is still small compared with Russia's large manpower capacity, the exposure of some services and branches to active combat is higher. The military police, for example, had rotated nearly 98 percent of its total active personnel in Syria by 2020. As for the Russian Aerospace Forces, 87 percent of tactical aviation staff and 91 percent of rotary-winged crews had gained real combat experience in Syria by October 2018.

The Russian Aerospace Forces carried out some 44,000 sorties between September 2015 and November 2020. The air warfare gains made were invaluable to Moscow. As one Russian military expert put it, "the Russian Aerospace Forces had many assets but little real combat experience in modern warfare. . . . Since [the 2008 Russia-Georgia War], the Russian Aerospace Forces have received about 1,000 new and modernized aircraft and helicopters but had no experience operating them and little understanding of the new capabilities."

As a result of these gains, Russia's strategic activities on its southern flank cannot be isolated from the threat landscape on NATO's eastern flank that informs the alliance's defense planning. Although Russia's contemporary doctrinal order of battle is predominantly defensive, the lessons learned from combat operations in Ukraine and Syria and Russia's indirect intervention in Libya have upgraded the effective capabilities of the Russian Armed Forces. These tested capabilities can easily be translated into the positioning of assets in Russia's Western Military District against NATO member states along Russia's western border.

From the standpoint of Russia's posture in the Mediterranean, three additional trends can be highlighted. First, Russia has been enhancing its naval base in the Syrian city of Tartus. While Tartus was a logistical base during the Soviet era, the Russians have been diligently investing in the facility, turning it into a hub for more complex naval operations.

Second, Russia has forward-deployed A2/AD capabilities in the Levant. The Russian military has deployed a layered air- and missile-defense architecture in Syria with S-400 and S-300V4 strategic surface-to-air missile systems, Buk-M2E missiles, and Pantsir batteries to cover long, medium, and short ranges, respectively. This formidable air-defense architecture is networked with the Syrian Air Defense Force's assets, sea-based S-300FM systems embarked on missile cruisers, and Krasukha-4 and other electronic warfare systems deployed at the Hmeimim air base.

Finally, one of the most interesting aspects of Russia's military involvement in Syria relates to the logistical connection established with Libya. The Russian Mig-29 and Su-24 fighter aircraft deployed to Libya—as first reported and confirmed by U.S. Africa Command—flew there from Hmeimim. Strikingly, Hmeimim has also been instrumental in servicing Russian air traffic to Benghazi and Al-Watiya air base in Libya. These developments suggest the rise of a systematic link between Russian forward-basing efforts in Syria and deployments in the North African country.

CAPITALIZING ON THE SOVIET NAVAL LEGACY

Within a doctrinal order of battle that comprises four fleets and one flotilla, the Russian Navy's primary objectives are sea denial and the safeguarding of Russia's submarine-based nuclear deterrent. Due to growing shipbuilding limitations, Moscow's maritime capabilities focus on littoral defense, with few expeditionary capabilities. The Northern and Pacific Fleets cover Russia's nuclear deterrent. The Northern Fleet is the most advanced and is responsible for Russia's Arctic portfolio.

Since Russia's illegal 2014 annexation of Ukraine's Crimean Peninsula, the Black Sea Fleet has added an expeditionary capability to this order of battle. This fleet, which operates from Crimea, has been augmented with new platforms and weaponry and underpins Russia's Mediterranean activities.

The evolving role of the Russian Navy supports the military's forward-basing efforts in the Eastern Mediterranean. This evolution dates back to July 2015, when Putin personally assembled a meeting aboard a Russian Navy frigate to discuss the military's naval strategic road map. Tellingly, one of the meeting's top agenda items was Russia's foothold in the Mediterranean. Later that year, Russia announced a new, aspirational maritime doctrine. The document was designed to give the navy a more robust outlook in accordance with Moscow's paradigm of great power competition. Although this planning marked a new chapter in Russia's military thinking, the country's contemporary concepts in the Mediterranean follow in Soviet footsteps.

The Soviet Navy's Mediterranean portfolio dated back to 1958 as Moscow's geostrategic response to the Eisenhower Doctrine, under which the United States offered to protect Middle Eastern countries threatened by communist aggression, and the U.S. intervention in Lebanon, known as Operation Blue Bat. Later, the Soviet military's Mediterranean strategy led to the birth of the Fifth Eskadra—the navy's Mediterranean squadron—to counterbalance the U.S. Sixth Fleet. The Fifth Eskadra and the Kremlin's political-military stance marked a symbiotic relationship in which the Soviet Navy pioneered Moscow's regional interests. Furthermore, the cultivation of strategic ties with regional actors enabled the Soviet Navy to maintain a standing presence away from its home ports in the continental Soviet Union.

The Soviet Union's Mediterranean deployments were more about sending strategic signals and promoting Moscow's influence abroad, as well as counterbalancing the West, than about building actual naval war-fighting capacities. Besides, the Soviet Mediterranean naval group had to operate with several limitations: the Montreux Convention governing control over the Turkish Straits, the mercurial characteristics of states and regimes in that part of the world, and overstretched logistics from the Soviet mainland to the southern seas. As a result, instead of forward-homeporting a bulky maritime task force, Soviet defense planners opted for a flexible doctrinal order of battle for the Fifth Eskadra, which was reinforced at times of escalation, such as the 1967 and 1973 Arab-Israeli wars.

Today's Russian naval deployment strategy in the Mediterranean is similar to Moscow's Cold War posture. However, the combination of new weapons systems, novel concepts of operations, and more ambitious political-military goals enables a more capable set of assets.

THE GEOPOLITICS OF CRUISE MISSILES

The development and operationalization of a new family of cruise missiles has significantly augmented the Russian military's power-projection capabilities in the Mediterranean.

For at least three centuries, Russian military-strategic culture was deeply shaped by the idea of expanding Russia's influence toward its southern waters: the Sea of Azov, the Black Sea, and the Caspian Sea. These waters were also critical routes for Russian power projection into the Mediterranean and the Middle East while serving as maritime buffers to keep Russia safe. Throughout history, Russian elites attached great importance to maintaining access to warm-water seaports on the Black Sea, which is linked to the world's oceans through the Turkish Straits, and to using the Black and Caspian Seas as channels to enter the Middle East.

The collapse of the Soviet Union led to the emergence of geopolitical competition in Russia's southern seas. When the Fifth Eskadra was disbanded in 1992, Turkey—a NATO member—loomed large as the primary naval actor in the Eastern Mediterranean. In the meantime, as Ukraine became independent in the Black Sea region, Russia's maritime military arc between the Mediterranean and Black Sea basins was challenged significantly.

Against this backdrop, the Black Sea Fleet has predominantly pursued the Kremlin's power-projection efforts in the Mediterranean. Since its 2014 annexation, Crimea has come to the fore in this respect. Equipping the Black Sea Fleet with conventional strategic offensive capabilities in the form of new-generation Kalibr cruise missiles is the top priority of the Russian naval modernization program. In October 2015, Russia's Caspian Flotilla launched the first land-attack cruise missiles to pound the Syrian battleground. The early successes of this new era of missile warfare substantially influenced Russian naval strategic developments: since 2015, Moscow has carefully rotated naval platforms equipped with Kalibr missiles in Mediterranean waters.

This new chapter for the Russian Navy, along with crucial lessons learned from the Mediterranean frontier, is of key importance for the military balance between Russia and NATO for three reasons. First, Kalibr is an umbrella term for a broad set of capabilities. In the words of one security analyst, "there are well over a dozen different variants in the Kalibr missile family, varying in launch platform, range, target profile and speed."

Second, Kalibr missiles can be launched from a broad array of platforms, from small surface combatants—suitable for the Caspian Flotilla—to submarines. Therefore, the missiles are a very flexible asset that enables a long list of operational scenarios.

Third, Kalibr missiles can form a key pillar of Russia's maritime power perspective. Even though the country's shipbuilding sector has been facing difficulties, strategic forecasts estimate that by 2024, the Russian Navy could operate up to eighty-five Kalibr-capable surface combatants and submarines with over 1,200 launch cells across its fleets and flotilla. This would represent what one analyst has described as true "distributed lethality." With its achievements in Syria, Russia has become one of the few nations that can launch conventional surgical strikes with multiple platforms in different parts of the world from thousands of miles away.

RUSSIA'S INTENSIFIED SUBMARINE PRESENCE

The Russian Navy has only limited capabilities in traditional power projection and expeditionary naval warfare platforms. Russia's largest surface combatants are legacy Soviet-era warships, which will become less sustainable and, eventually, obsolete over time. Most of the new and modern surface combatants are relatively small vessels. What is more, Russia's amphibious landing platforms are reaching the ends of their natural lives. As a result, submarines play an important role in meeting Moscow's power-projection ambitions.

Since the Russian intervention in Syria began in 2015, the Mediterranean has witnessed an intensive submarine presence. Moscow's submarine boost came right after Russian operations started in the Levant. In February 2016, Vice Admiral Clive Johnstone, then commander of NATO's Maritime Command, said that his submarine cells were reporting more activity from Russian submarines than they had seen since the Cold War. In the same year, Russian submarine activities in the Mediterranean reached an unprecedented tempo. Open-source military publications noted in December 2016 that the U.S. Navy and NATO forces had tracked down at least two Russian guided-missile submarines in the Mediterranean.

At least one of these submarines was probably a Project 949A Antey. Equipped with P-700 Granit supersonic sea-skimming antiship missiles, this formidable platform is known as a carrier-killer sub, whose primary mission is to hunt down aircraft carrier battle groups. What is more, the Russian carrier-killer submarine identified in 2016 was thought to be in close proximity to at least two Western aircraft carriers, the U.S. Navy's USS Eisenhower and the French Navy's Charles de Gaulle.

Russia's submarine presence in the Mediterranean is also important in terms of the Russian Armed Forces' submarine-launched cruise missile (SLCM) capacity. After launches from surface combatants in early December 2015, the Russian Navy conducted its first Kalibr SLCM strikes in Syria from its submarine platforms. These Tomahawk-like strikes marked a turning point for Russian concepts of operations: traditionally, Soviet and Russian long-range missile concepts were planned either for nuclear warhead delivery or for A2/AD missions. An SLCM capability is possibly the most game-changing asset that Russia has tested in its Mediterranean campaign.

Finally, given Soviet submarine operations in Swedish territorial waters in the 1980s, especially systematic intrusions into coastal defense zones and major naval bases, one strategic aim of current Russian submarine operations could be to test NATO's naval response capabilities in the Mediterranean. In this respect, it is important to note that the Russians are believed to be regularly rotating at least two Varshavyanka-class submarines from the Black Sea Fleet to the Tartus base in Syria.

THE EASTERN MEDITERRANEAN AS A THEATER FOR MOSCOW'S DEFENSE CAPABILITY DEVELOPMENT

The U.S. Navy has historically sustained its combat posture through a geopolitical perspective consisting of two hubs. Whereas the Mediterranean and the Western Pacific were priorities during the Cold War, the northern Arabian Sea and the Gulf have replaced the Mediterranean since Operation Desert Storm against Iraq in 1991. As a result, Moscow found a more suitable landscape for its activities in this critical sea basin on NATO's southern flank.

In the past decade, Moscow has smartly capitalized on developments in the Eastern Mediterranean to enhance its overall military posture in three ways. First, since the annexation of Crimea, the Russian Black Sea Fleet has been more active in projecting power into the Mediterranean. Taking advantage of free passage through the Turkish Straits, Moscow has established a strategic naval bridge between the Black Sea Fleet and the enhanced naval base in Tartus. This bridge now extends to Libya.

Second, the experiences gained in the Syrian theater and, more recently, in Libya have allowed the Russian military to train its personnel and test a range of new capabilities that can easily be transposed to other, more strategically critical geographies, like Eastern Europe.

Finally, Moscow's doctrinal order of battle has improved with the launches of new platforms and systems in the Eastern Mediterranean. Russia's boosted naval operations, its long-range, high-precision, sea-launched Kalibr cruise missiles, and its forward-deployed airpower assets in the Mediterranean are manifestations of this military reality. Russia has pursued a gradual and multidimensional expansion of its military capabilities in a conflict zone where, with the exception of Turkey in Libya, it has not encountered any resistance from NATO allies. This experience is likely to greatly enhance Russia's military posture in potential conflict zones like Eastern Europe or the Baltic, where the challenge of containing Russia's ambitions is significantly more important for the alliance.

13. BREAKING: 2022 Budget Request Supports Purchase of Hypersonic Cruise Missiles

02.06.2021

National Defense Magazine

https://www.nationaldefensemagazine.org/articles/2021/6/2/2022-budget-request-supports-purchase-of-hypersonic-cruise-missiles

The Pentagon's point man on hypersonics technology called the Biden administration's budget proposal for fiscal year 2022 a "milestone" in the development of the game-changing weapon systems.

The proposal released on May 28 supports an "accelerated buying strategy" that will transition some of the various research-and-development programs to weapons procurement, Mike White, principal director for hypersonics in the office of the undersecretary of defense for research and engineering, said June 2.

"The budget request is a very important statement on the importance of hypersonics," he said at a talk hosted by the Center for Strategic and International Studies. "The '22 budget budgets to buy those systems once they're developed in numbers moving out so we are really accelerating the fielding of capability."

The Army, Navy, Air Force and Defense Advanced Research Projects Agency all have hypersonic offensive weapon prototypes at various stages of development using a variety of methods to achieve highly maneuverable systems that travel at speeds of Mach 5 or higher. White's office oversees offensive weapons, defensive capabilities to counter enemy hypersonic systems, and reusable aircraft.

There are two primary types of offensive hypersonic weapon systems. One is boost-glide which calls for using a rocket booster to propel a missile to high altitudes, releasing a vehicle that glides down at high speeds. The other is air-breathing cruise missiles.

The Air Force's AGM-183A Advanced Rapid Response Weapon, or ARRW, being developed by Lockheed Martin is poised to be the first offensive system to move from development to procurement, White said.

There will be a number of test flights for ARRW — pronounced "arrow" — over the next year with fielding planned in 2022, White said.

"All we need is our industry partner Lockheed Martin to deliver the capability, and then we'll buy it," White said.

The Defense Department is prioritizing the development of air-launched cruise missiles. There is also funding for an Air Force hypersonic attack cruise missile and the Navy's offensive anti-surface warfare increment 2.

"They allow us to bring in the fourth-gen fighters into the fight on day 1" to launch the weapons, he said, mentioning the F-16 and F-15EX aircraft. The Navy and Air Force are working closely together to coordinate integration of hypersonic missiles into other platforms such as bombers, he added.

“Cruise missiles … are smaller and are more affordable because of that smaller size, and they're more compatible with a wider range of platforms,” White said.

As for hypersonic glide, the Army is producing the common glide body and the Navy is responsible for future weapon design, White said.

“It's not a joint program. It's an integrated program of common interest,” he said. There are also big plus-ups for wind tunnels and flight-testing infrastructure, including converting Global Hawk unmanned aircraft to monitor flight tests rather than strings of Navy ships, which White said was costly.

The accelerated development strategy for hypersonics was planned during the Trump administration, but has also had strong support from the Biden administration to continue the momentum, he said.

“It really is an important statement that we've made in the department and the new administration to move forward,” White said. “Now it's in the hands of Congress as we move forward to try to make sure that we can communicate the importance of this. They've been very supportive thus far,” he added. “What we're developing is a family of weapon systems that are air-, land- and sea — surface and subsurface — launched to deliver a wide range of effects to the battlefield to allow the defeat of deep inland targets … and maritime targets and coastal targets and heavily defended targets and targets on the move,” he said.

“We're looking at multi-mission, multi-platform, multi-domain operations to deliver that capability,” he added.

White mentioned reports that adversaries such as China and Russia have moved ahead of the United States in hypersonic capabilities.

“As you understand that landscape, you really understand how real this is and how important it is — a national imperative in my mind — that we move forward and deliver to our warfighters this capability,” White said.

14. Chinese army trains engaging targets at sea using MRLs, ATGMs

02.06.2021

Jane's Defence

https://www.janes.com/defence-news/news-detail/chinese-army-trains-engaging-targets-at-sea-using-mrls-atgms

The People's Liberation Army Ground Force (PLAGF) has conducted a series of live-fire exercises aimed at engaging targets at sea using long-range artillery and anti-tank guided missile systems, according to recent news reports by China Central Television (CCTV).

On 29 May the state broadcaster showed video footage of a brigade under the PLAGF's 80th Group Army using several PHL-03 multiple rocket launchers (MRLs) at Bohai Bay to launch co-ordinated strikes against simulated maritime targets after deploying unmanned aerial vehicles to carry out reconnaissance and target acquisition.

CCTV quoted Captain Li Yu, a company commander at the brigade, as saying that “the troops tested multiple tactics and conducted combined strikes on targets, as the exercise further validated these methods and showed long-range multiple rockets are highly deadly against maritime targets”, according to the state-owned *Global Times* newspaper.

The exercise followed a CCTV report in October 2020 stating that the PLAGF's Tibet Military Command had begun deploying what it claimed to be a new, longer-range, guided rocket with the PHL-03 MRL that achieves greater accuracy.

The new rocket, the range of which CCTV claimed is 30 km greater than that of the standard rockets used by the system, was shown by the broadcaster being launched by an artillery brigade during a high-altitude, live-fire exercise and accurately striking several small targets in quick succession.

15. Turkey's First Anti-ship 'Atmaca' Missile Passes Final Test

19.06.2021

Defense World

https://www.defenseworld.net/news/29848/Turkey_s_First_Anti_ship__Atmaca__Missile_Passes_Final_Test

Turkey’s conducted the last test firing of its homegrown Atmaca long-range anti-ship missile on Friday.

"The anti-ship missile Atmaca, our homeland's steel sword, has hit a target ship during the last test today before it will enter service," Turkish president Recep Tayyip Erdogan posted on Twitter, attaching a 58-second video showing the test firing of the Atmaca missile.

The Atmaca project seeks to replace the U.S.-built Harpoon missile from the military's arsenal as part of a campaign to wean Turkey's defense infrastructure from overt dependence on U.S. and NATO equipment.

Manufactured by Roketsan, Atmaca is high-precision, long-range, surface-to-surface, precision strike anti-ship missile which can be integrated with patrol boats, frigates, and corvettes. It has a range of over 200km, posing a threat to targets far outside visual range.

It also provides a target update, re-attack, and mission abort capability via modern data link.

16. MBDA's Sea Ceptor Missiles Ordered for Brazilian Navy Frigates

17.06.2021

Defense World

https://www.defenseworld.net/news/29834/MBDA___s_Sea_Ceptor_Missiles_Ordered_for_Brazilian_Navy_Frigates#.YNohUehKiM8

European MBDA will provide Sea Ceptor air defence missile systems for the Brazilian Navy's new Tamandaré-class frigates.

Sea Ceptor is a smart weapon control system (WCS) that together with the fully-active Common Anti-air Modular Missile (CAMM) provides comprehensive self-defence and local area air defence (LAAD). This will enable Brazil's Tamandaré-class frigates to protect themselves, consorts and fixed infrastructure against the full range of threat types at sea or in harbour, and in the most stressing operational scenarios.

Sea Ceptor is in operational service with the Royal Navy's Type 23 frigates, and has been selected for the new Type 26 and Type 31 frigates. Brazil joins Chile, New Zealand and Canada in a growing list of international Sea Ceptor users. The CAMM missile has also been delivered to the British Army in the Ground-Based Air Defence (GBAD) role.

17. Russia Developing 80MM 'Light' Multiple Launch Rocket system

06.06.2021

Defense World

https://www.defenseworld.net/news/29739/Russia_Developing_80MM____Light____Multiple_Launch_Rocket_system#.YNoh0-hKiM9

A new 'light' Multiple Launch Rocket system (MLRS) based on an 80 mm rocket is being developed in Russia with serial production planned for 2024.

The new MLRS will be unveiled at the Army-2021 land forces exhibition which will be held from August 22 to 28 at the Patriot Exhibition Center near Moscow.

This was announced by the head of the Tekhnodinamika holding Igor Nasenkov at the congress of the Russian Engineering Union. "With positive results, completion of the development is possible in 2023, and after state tests, its serial production can commence by the end of 2024," the Russian MoD's TV channel, TVZveda reported Sunday.

According to Nasenkov, work on the new MLRS is taking place at NPO SPLAV enterprise which is the developer of all the multiple launch rocket systems in service.

Research work is underway to use the unguided 80 mm caliber S-8 missile as the main projectile of the new light MLRS.

Details of the vehicle on which the new light MLRS is to be mounted are not known as yet nor is its range. However, a light MLRS will enable quick transport and deployment at the cost of range as compared to heavier MLRS systems.

Current Russian MLRS such as the Smerch use 300mm heavy and long range rockets but come at a price in terms of mobility and deployment. The 300mm 9M55K rocket has a solid propellant rocket motor whose firing range varies from 20km to 70km.

The Russian Army used its Grad, Uragan and Smerch MLRS successfully in Syria, striking terrorist fortifications by raining down fire from the sky. It is believed that multiple MLRS projectiles striking a wide area forced ISIS terrorists to abandon their positions during several encounters in Syria.

18. Dynetics Unveils 'Enduring Shield' Air Defense, Possible Competitor to Israeli 'Iron Dome'

05.06.2021

Defense World

https://www.defenseworld.net/news/29737/Dynetics_Unveils____Enduring_Shield____Air_Defense__Possible_Competitor_to_Israeli____Iron_Dome___#.YNophOhKiM9

American firm, Dynetics has unveiled Enduring Shield, a mobile ground-based weapon system designed to acquire, track, engage and defeat unmanned aircraft systems, cruise missiles, and rockets, artillery and mortars.

Enduring Shield is capable of firing a range of missiles while, providing current and future growth capabilities. The system offers a 360-degree envelope with the ability to engage multiple targets simultaneously. It can be fully integrated with the Army's Integrated Air and Missile Defense Battle Command System, and offers both cyber resiliency and electronic warfare protections, a Dynetics release said Thursday.

Offering protection against similar threats as the 'Iron Dome,' the 'Enduring Shield' system should prove a direct competitor to the famed Israel-developed system which has also been purchased by the U.S. Army.

Derived from Dynetics technology and modified around previous Army science and technology programs, the 'Enduring Shield' solution has been bid to meet the Army's Indirect Fire Protection Capability Increment 2 program needs.

In creating Enduring Shield, Dynetics redesigned the launcher, created cost efficiencies, reduced complexity and refined capabilities.

"The Enduring Shield solution leverages Dynetics' experience with ground-based launcher systems for the Army, including hypersonic missiles and other programs. We are eager to offer this all American solution to

the Army's cruise missile and other air defense needs," said Ronnie Chronister, senior vice president for Weapons Technology and Manufacturing at Dynetics.

The manufacturing of components, performance of initial assembly and system integration will be conducted in Huntsville, Alabama. Final assembly and system integration will be performed in Lawton, Oklahoma. Dynetics is a wholly-owned subsidiary of Leidos Inc.

19. Northrop Wins U.S.A.F.’s Minuteman III Sustainment Contract

11.06.2021

Defense World

https://www.defenseworld.net/news/29782/Northrop_Wins_U_S_A_F____s_Minuteman_III_Sustainment_Contract#.YNoqEehKiM9

Northrop Grumman said today it won a $287 million base contract by the U.S. Air Force to provide engineering services to assist in sustaining the Minuteman III missile system.

The Propulsion Subsystem Support Contract (PSSC) 2.0, awarded last month, with options, has a contract ceiling of $2.3 billion over 18.5 years, and supports the Air Force’s Minuteman III Systems Directorate, located at Hill Air Force Base, Utah.

The Minuteman III intercontinental ballistic missile (ICBM) must remain on alert and ready until its end-of-life – later next decade. Minuteman III was originally manufactured in 1970 and has undergone multiple refurbishments to ensure viability. The Northrop Grumman propulsion systems team is addressing sustainment challenges of the missile propulsion system such as material obsolescence, associated hardware and/or equipment repair, and propellant aging-surveillance testing and analysis.

20. US Army fires autonomous launcher in Pacific-focused demo

16.06.2021

Defense News

https://www.defensenews.com/land/2021/06/16/us-army-fires-autonomous-launcher-in-pacific-focused-demo/

WASHINGTON — The U.S. Army fired an autonomous launcher in a June 16 demonstration at Fort Sill, Oklahoma, focused on how it might be deployed to take out enemy ships and other defensive systems in multidomain operations in the Indo-Pacific theater.

A concept video shows C-130 transport aircraft landing on a strip in an island in the Pacific Ocean. The Autonomous Multidomain Launcher, or AML, comes off the C-130’s ramp while a High Mobility Artillery Rocket System, or HIMARS, drives out of the other aircraft. The two launchers deploy as a manned-unmanned team to strategic points on the island. One launcher fires a simulated Precision Strike Missile, or

PrSM — the future Army Tactical Missile System replacement — to hit an enemy ship detected in the nearby ocean. The other fires an extended-range version of PrSM to take out an air defense system located on an enemy-occupied island.

Once the missiles destroy their targets, the launchers head back to the bellies of the C-130 and the aircraft takes off while U.S. fighter jets deploy during the window of opportunity created by the destruction of those enemy targets.

In the demonstration, according to Brig. Gen. John Rafferty, who is in charge of the Army's long-range precision fires modernization effort, the AML repeated the process and subsequently deployed to two other islands following the first scenario.

Overall, the Army fired seven rockets simulating the PrSM's future range capability from roughly 500 kilometers to well over that distance, and the service also demonstrated a shorter-range rocket capability in the third island scenario to reflect a more tactical fight in support of divisions and corps, Rafferty told reporters in a phone call directly after the demonstration.

The science and technology effort came together several years ago when the Long-Range Precision Fires Cross-Functional Team within Army Futures Command joined up with the service's Combat Capabilities Development Command's Aviation and Missile Center and Ground Vehicle Systems Center to develop the prototype launcher.

The AML is equipped with a remote launcher turret and fire control system that enables compatibility with current munitions like the Guided Multiple Launch Rocket System and future weapons like PrSM.

The demonstration showed the soldiers trying it out that the autonomous launcher could help them pass off current activities within operations that are dangerous or that can't be done with systems today.

Feedback showed soldiers felt the capability could keep them in the fight longer and offered more protection and increased lethality such as a deeper magazine since the cab of the HIMARS can be replaced to accommodate more munitions.

"You can have all kinds of different configurations of missiles depending on what kind of fight you want to go into," Jeffrey Langhout, the Aviation and Missile Center director, said during the call with reporters. "Easily one of the biggest things it does is it just physically gives us more room without having to go spend gazillions of dollars to buy a whole new launcher. It enables us to kind of use what we have and do some minor modifications to it, which gives us options moving forward on however the Army chooses to move forward with the missile fleet."

The program also uses technology efforts already under development within the Army such as the robotic technology kernel that will be used in future robotic combat vehicle capability, other mature technology-enabling leader-follower autonomy and the war-fighter machine interface.

The effort has cost roughly $10 million so far — some of which came through congressional plus-ups — to create the prototype and demonstrate its capability, Rafferty said.

The Army has yet to decide whether an autonomous launcher will be a part of the future force, but the demonstration marks a starting point. Rafferty said the Army will continue to work with the operational force in the Indo-Pacific theater to develop the concept, and the service will continue to mature the technology.

The service received approval to move forward on a Joint Capabilities Technology Demonstration and will partner with the Indo-Pacific combatant command and the Aviation and Missile Center to explore the capability through early prototyping and participation in robust operational exercises in theater over the next several years.

The Army will also spend the next year, according to Rafferty, working on a transition agreement with the acquisition side of the house to develop what might eventually become a program of record. “We’re not there yet. It’s still pretty early in the [science and technology], and this concept development was really to show our acquisition partners and AFC leadership what we think we could do and what could be.”

21. Bangladesh Army inducts new 300 mm MRLs

21.06.2021

Jane's Defence

https://www.janes.com/defence-news/news-detail/bangladesh-army-inducts-new-300-mm-mrls

The Bangladesh Army has inducted into service an undisclosed number of Tiger T-300 multiple rocket launchers (MRLs).

The systems, which are based on a 6×6 Kamaz truck chassis, were formally handed over to the army in a ceremony held on 20 June at the Corps of Military Police Centre & School (CMPC&S) in Savar Cantonment near Dhaka, according to a statement released the same day by Inter-Services Public Relations (ISPR), the media wing of the Bangladeshi military.

Prime Minister Sheikh Hasina, who attended the event via video conference, said that the induction of the Tiger system has added “a new dimension to the capabilities of the Bangladesh Army”.

Hasina went on to say that the modernisation of the service will continue under the ‘Forces Goal 2030' initiative, which outlines a range of major acquisitions to modernise the Bangladesh military.

Each launch vehicle in the T-300 system carries four launch tubes, each of which is capable of firing Roketsan TR-300-series projectiles, including the 4.75 m-long TR-300E unguided rocket, which has a stated range of between 40 km and 100 km.

The system can also fire the TRG-300 Tiger missile, which comes in two variants – Block I and Block II (Enhanced Warhead Dynamic Effectiveness) – with the first one having a range of between 30 km and 120 km and the second one of between 20 km and 90 km.

According to Roketsan, guidance for both TRG-300 variants is provided by GPS and aided by an inertial navigation system. Both missiles feature aerodynamic control with an electromechanical actuation system.

22. S.Korea to Develop New Missiles, Space Launchers after U.S. Lifts Restrictions

31.05.2021

Defense World

https://www.defenseworld.net/news/29689/S_Korea_to_Develop_New_Missiles__Space_Launchers_after_U_S__Lifts_Restrictions#.YNotfehKiM9

South Korea plans to develop new equipment including new missiles and space launch vehicles after Washington scrapped a decades-old pact that banned Seoul from developing certain weapons.

The decision to lift restrictions, first imposed in 1979, was announced by the U.S. earlier this month. It bans the country from developing or possessing missiles with a maximum flight range greater than 800 km.

"In order to beef up our defense capabilities following the termination of the missile guidelines, we will supplement and develop our military systems. We will also develop diverse platforms that operate space launch vehicles in the air and at sea," the ministry said in a report submitted to the National Assembly.

Fresh ways of launching space rockets could include using aircraft and vessels, officials told Yonhap News Agency.

"We will continue to abide by the international non-proliferation regime even after the end of the guidelines," the ministry said.

North Korea has slammed U.S.' decision. "The U.S., doggedly branding the measures taken by the DPRK for self-defense as violation of UN 'resolutions' grants its allies unlimited right to missile development. It is engrossed in confrontation despite its lip-service to dialogue," government-owned Korean Central News Agency (KCNA) reported.

"The termination step is a stark reminder of the U.S. hostile policy toward the DPRK and its shameful double-dealing," the report said.

23. Space Force, DoD agencies planning multi-orbit sensor network to track hypersonic missiles

21.06.2021

Space News

https://spacenews.com/space-force-dod-agencies-planning-multi-orbit-sensor-network-to-track-hypersonic-missiles/

WASHINGTON — The U.S. Space Force last month selected Millennium Space Systems and Raytheon to design sensors that can track hypersonic missiles from medium Earth orbit.

If successful, sensors in medium orbits could become a new addition to the United States' layered missile defense system that currently includes ground, sea-based and space sensors.

A multi-orbit network of space sensors that can detect and track both ballistic and hypersonic missiles is a goal now being pursued by the U.S. Space Force, the Defense Department's Space Development Agency and Missile Defense Agency.

Some pieces of the network already are in place or in development.

The Space Based Infrared System (SBIRS) of geostationary missile warning satellites has been in operation for a decade. In addition, the Space Force is investing billions of dollars in a new constellation of Next-Generation Overhead Infrared (OPIR) geostationary and polar-orbiting satellites — made by Lockheed Martin and Northrop Grumman, respectively — to provide global early warning of missile launches.

The Space Development Agency (SDA) and Missile Defense Agency (MDA) are developing sensor satellites closer to Earth in low orbits to detect and track maneuvering hypersonic glide vehicles and other advanced weapons that could evade current early warning satellites, ship and ground-based radar sensors.

L3Harris and SpaceX are making wide-field-of-view missile tracking satellites for SDA. Northrop Grumman and L3Harris are working on medium-field-of-view tracking satellites for MDA. The MDA's lower orbit tracking satellites would provide so-called "fire control" data needed to be able to target an interceptor weapon to shoot down the hypersonic missile.

The medium orbit sensors that Millennium Space and Raytheon will design over the next 18 months could eventually be added to the mix depending on how they perform in future tests.

The Space Force's Space and Missile Systems Center decided to rely on digital designs for the initial studies before it commits to buying satellites. The models will "support U.S. Space Force architecture analysis by providing realistic cost, schedule, and performance predictions, essentially enabling a digital 'try it before you buy it' approach," SMC said in a statement.

After evaluating the digital prototypes, the Space Force could recommend trades in the architecture. For example, it could suggest replacing geostationary or low Earth orbit satellites with sensors in medium orbits.

Millennium Space, which is owned by Boeing, and Raytheon are working under cost-sharing contracts awarded by SMC's Space Enterprise Consortium. The contracts are for digital payload designs but include options for SMC to buy up to three actual satellites if the prototypes pass their design reviews.

Jason Kim, CEO of Millennium Space, said the company is taking advantage of Boeing's expertise in digital engineering to develop the missile tracking prototype sensors.

"It's important that we have digital models to help SMC and the broader community evaluate next-generation OPIR sensors and integrate them with weapons systems," Kim said in an interview.

With sensors in multiple orbits, the Space Force could make trades based on what provides the most capability for the cost, he said.

Compared to sensors in geostationary satellites, sensors in medium orbits provide better sensitivity, he said. And they can track a wider area than satellites in low Earth orbit. "You see a larger swath of the Earth, the horizon does't get in the way as in low Earth orbit," Kim said. "With fewer numbers of satellites you're able to track ballistic and hypersonic missiles."

“It’s about having a robust architecture. MEO gives you added resiliency,” he said.

Rob Aalseth, Raytheon’s mission area director for missile warning, said having digital missile tracking prototypes will help the Space Force demonstrate a new approach to buying sensors and satellites.

“This is a demonstration to provide a digital twin,” Aalseth told *SpaceNews*. “It will help the Space Force deliver a digital engineering environment and give them detailed real models they can work with.”

In a digital missile defense architecture, the Space Force will be able to see how warning satellites interact with tracking sensors, he explained. “It’s a very detailed digital twin so they can look at the architecture and how it works with other systems, and make trades in real time.”

“Missile warning satellites are the global eyes in the sky, the bell ringers,” said Aalseth. The tracking satellites receive cues from the warning satellites and can monitor the target through all phases of flight, he said.

For hypersonic missile defense, it’s important to have global tracking from space and preferably at different altitudes, Aalseth added. “Radars on the ground are limited. In low Earth orbit, you need a large number of satellites, maybe hundreds. In medium Earth orbit with a smaller number of satellites you can get global coverage and more sensitivity to see objects.”

24. US pulls antimissile batteries from Middle East: Report

18.06.2021

Al Jazeera

https://www.aljazeera.com/news/2021/6/18/us-pulls-antimissile-batteries-from-middle-east-report

The Biden administration is withdrawing Patriot antimissile batteries from four Middle East countries as the US reduces its military footprint in the region amid a reduction in tensions with Iran, a US news outlet reported on Friday.

The Pentagon is pulling about eight Patriot antimissile batteries from Saudi Arabia, Iran, Kuwait and Jordan, as well as a Terminal High Altitude Area Defense (THAAD) system from Saudi Arabia that had been deployed by the previous Trump administration, the Wall Street Journal reported citing unnamed US officials.

The redeployment includes hundreds of US troops who operate the systems and began earlier this month following a June 2 phone call in which US Defense Secretary Lloyd Austin informed Saudi Crown Prince Mohammed bin Salman of the shift, according to the Journal.

The withdrawal of anti-missile batteries marks a return to a more normal level of defence in the region where the US continues to maintain tens of thousands of troops even as it has reduced forces deployed to Afghanistan and Iraq, the Journal reported.

“We still have our bases in the countries of our Gulf partners, they aren’t shutting down, there is still substantial presence, substantial posture in the region,” a senior defence official told the Journal.

The US deployed Patriot antimissile batteries and troops to Saudi Arabia after Iranian drone attacks hit Saudi oil facilities and to Iraq in 2020 after a spate of missile and rocket attacks on US forces by Iran and Iranian-backed militias.

The US military acknowledged that more than 109 US troops had suffered concussions and other brain injuries in an Iranian ballistic missile attack on the Ain al-Assad military base in Iraq following the US air strike that killed Iranian General Qassem Soleimani.

President Joe Biden, who took over from former President Donald Trump in January, has sought to de-escalate tensions in the Middle East and US diplomats have been engaged in indirect talks with Iran on reviving the Iran nuclear deal.

US and Iranian diplomats engaged in a sixth round of talks in Vienna earlier this month as Iran considers rejoining the 2015 agreement prohibiting it from obtaining nuclear weapons in exchange for relief from punishing US economic sanctions.

Trump had unilaterally withdrawn from the Iran nuclear agreement and instituted a “maximum pressure” campaign on Tehran that Biden officials have said failed to achieve goals and had the effect of accelerating Iran’s nuclear development.

Iranians were voting on Friday for a new president to replace outgoing President Hassan Rouhani who had championed the nuclear agreement with the US in 2015.

25. Capacitação prepara instrutores para uso do Sistema de Planejamento Operacional Militar (SIPLOM)

15.06.2021

Ministério da Defesa

https://www.gov.br/defesa/pt-br/centrais-de-conteudo/noticias/capacitacao-prepara-instrutores-para-uso-do-sistema-de-planejamento-operacional-militar

Rio de Janeiro (RJ), 14/06/2021– A atualização de conhecimentos e a padronização de procedimentos para o emprego do Sistema de Planejamento Operacional Militar, o SIPLOM, contemplaram as atividades do 1º Estágio de Capacitação de Instrutores das Escolas de Altos Estudos Militares para Emprego desse Sistema. A cargo da Chefia de Operações Conjuntas do Estado-Maior Conjunto das Forças Armadas do Ministério da Defesa, a capacitação ocorreu de 7 a 11 de junho e contou com a participação de Oficiais instrutores da Escola de Guerra Naval (EGN), da Escola de Comando e Estado-Maior do Exército (ECEME) e da Escola de Comando e Estado-Maior da Aeronáutica (ECEMAR).

O evento, conduzido pela Subchefia de Comando e Controle do Ministério da Defesa, propiciou condições necessárias para que os Corpos Docentes das Escolas de Altos Estudos Militares atuem como núcleos multiplicadores dos conhecimentos referentes à utilização do SIPLOM. A capacitação também assegurou conhecimentos necessários para que os instrutores utilizem o Sistema em favor das disciplinas relacionadas às Operações Conjuntas, nos correspondentes cursos de altos estudos.

O Estágio foi sediado nas dependências da ECEME e contou com o apoio do Centro de Análises de Sistemas Navais (CASNAV). Esse Centro é responsável pelo desenvolvimento do Sistema e deu início ao conjunto de medidas para a sua divulgação no âmbito do Ministério da Defesa e das Forças Singulares.

26. Ensayos con misiles de la Armada brasileña

15.06.2021

Defensa.com

https://www.defensa.com/brasil/ensayos-misiles-armada-brasilena

Durante la primera semana de junio, buques y aeronaves de la Flota lanzaron armas sobre un objetivo de superficie, en la zona marítima oceánica entre Río de Janeiro y Cabo Frio (RJ), con el fin de mantener el alto nivel de competencia de sus tripulaciones y sistemas de combate.

En esta ocasión, el objetivo fue el casco del antiguo Muelle de Desembarco “Ceará”, considerado de gran tamaño, que fue remolcado por el Buque de Apoyo Oceánico “Purus” (G152) desde la Base Naval de Río de Janeiro hasta el área de ejercicio, ubicado a una distancia segura de la orilla.

La operación incluyó el Buque Submarino de Socorro “Guillobel” (K120), el Submarino “Tupi” (S30), el Buque Muelle Polivalente “Bahia” (G40) y las Fragatas “Independência” (F44) y “Liberal” (F43). La misión también contó con la participación de los helicópteros “Lince” (AH-11B), “Eagle” (UH-12) y “Guerreiro” (SH-16) y los helicópteros “Falcão” (AF-1B / C).

Los medios de la flota emplearon diferentes tipos de armas, entre ellos torpedos, misiles tierra-tierra, bombas y ametralladoras de aviones y cañones de fragata, culminando con el hundimiento del objetivo, como consecuencia de los impactos provocados por las armas

27. La FAB quiere tener 70 cazas Gripen y reducir a 15 o 16 KC-390 su pedido original de 28 ejemplares

04.06.2021

Defensa.com

https://www.defensa.com/brasil/fab-quiere-tener-70-cazas-gripen-reducir-15-16-kc-390-pedido-28

Afirmando no disminuir su capacidad operacional ni su desarrollo tecnológico, aunque sí su dotación inicial, fuentes de la Fuerza Aérea Brasileña a la par que daban cuenta, alteraciones presupuestales mediante, del número de KC 390 a ser adquiridos (no informándose acerca de la previsible mayor permanencia operativa de alguno de los Hércules que se pensaban desprogramar, en consecuencia de ese recorte), también intentan unificar su flota de combate a una sola unidad a reacción.

Por ello, se admite oficialmente que se gestiona la actual encomienda de cazas JAS 39 Gripen NG, localmente denominados F-39, lo cual, de llegarse a una solución afirmativa, podría acelerar la retirada de algunos F-5M y A-1, congelar definitivamente posibilidades de un reactor LIFT (estilo Leonardo M-346, Yak 130, etc) como paso previo al avión sueco y, repercutir moderada y favorablemente, quizá en alguna versión especial del Súper Tucano para cumplir esa función.

La decisión final, pasará nuevamente por el Ministerio de Hacienda, que ,semanas atrás había vetado la adquisición de 3 Airbus A 330 usados por parte del a FAB, con dinero recuperado de actos de corrupción, veto finalmente levantado por el resto del gobierno, ante lo cual las autoridades económicas ahora parecen poner el celo ,se dice, en las flotas de aviación policial que procedan a próximas renovaciones con recursos originados por el crimen.

28. Regime Especial de Tributação gera economia de R$ 70 milhões para empresas da BID

26.05.2021

Ministério da Defesa

https://www.gov.br/defesa/pt-br/centrais-de-conteudo/noticias/regime-especial-de-tributacao-gera-economia-de-r-70-milhoes-para-empresas-da-bid

Brasília, 26/05/2021 – A utilização do Regime Especial Tributário para a Indústria de Defesa (RETID) pelas empresas credenciadas na Base Industrial de Defesa (BID) resultou na redução de aproximadamente R$ 70 milhões nos contratos executados de 2014 a 2021. Apenas nos últimos dois anos, foram aproximadamente R$ 38 milhões. A informação foi apresentada pelos representantes dos Estados-Maiores das Forças Armadas durante a 33ª reunião da Comissão Mista da Indústria de Defesa (CMID). O encontro ocorreu na manhã da terça-feira (25), na sede do Ministério da Defesa.

Durante a reunião, os participantes abordaram temas como os status das licitações precedidas pelos Termos de Licitação Especial (TLE) já autorizados e a utilização do RETID. Eles também propuseram a classificação de três Produtos de Defesa (PRODE) e de 58 Produtos Estratégicos de Defesa (PED), além do credenciamento de uma Empresa de Defesa (ED) e de três Empresas Estratégicas de Defesa (EED).

Atualmente, a Base Industrial de Defesa (BID) possui 970 produtos cadastrados, dos quais 849 são PED e 121 PRODE, bem como 142 empresas credenciadas, sendo 113 Empresas Estratégicas de Defesa (EED) e 29 Empresas de Defesa (ED). Do total de empresas credenciadas, 55 estão habilitadas ao RETID, correspondendo a 598 produtos aptos à aplicação do benefício tributário.

O evento foi presidido pelo Chefe do Estado-Maior Conjunto das Forças Armadas, Tenente-Brigadeiro do Ar Raul Botelho. Participaram da reunião o Secretário-Geral, Sérgio José Pereira; o Secretário de Produtos de Defesa, Marcos Degaut; o Vice-Chefe de Logística e Mobilização, General de Divisão Marcos André da Silva Alvim; o representante do Estado-Maior da Armada, Contra-Almirante Ricardo Fernandes Gomes; o representante do Estado-Maior da Aeronáutica, Brigadeiro Intendente Alcides Roberto Nunes; o representante do Estado-Maior do Exército, General de Brigada Dênis Taveira Martins; o representante do Ministério da Economia, Tólio Edeo Ribeiro; o representante do Ministério da Ciência, Tecnologia e Inovações, Eduardo Soriano Lousada; o Diretor do Centro de Apoio a Sistemas Logísticos de Defesa, Vice-Almirante Marcus Vinícius Lima de Souza; e o Diretor do Departamento de Produtos de Defesa, Contra-Almirante Sérgio Lucas da Silva.

A próxima reunião da CMID está prevista para agosto.

29. Fortalecimento da Base Industrial de Defesa está entre objetivos da Pasta

25.05.2021

Ministério da Defesa

https://www.gov.br/defesa/pt-br/centrais-de-conteudo/noticias/fortalecimento-da-base-industrial-de-defesa-esta-entre-objetivos-da-pasta

Brasília, 25/05/2021- Ao comemorar o Dia da Indústria, neste 25 de maio, o Ministério da Defesa, por meio da Secretaria de Produtos de Defesa (SEPROD), destaca a Mobilização Industrial e a Economia de Defesa como atividades essenciais para a interface da Pasta em diferentes setores da indústria. O objetivo é fortalecer a Base Industrial de Defesa (BID) e buscar a independência tecnológica no preparo das Forças Armadas e em benefício da sociedade.

A Mobilização Industrial abrange o conjunto de atividades a serem empreendidas e orientadas pelo Estado, com ênfase nos setores econômico, científico e tecnológico. É responsável por promover imediatas e profundas repercussões em todas as demais expressões do Poder Nacional. Já a Economia de Defesa engloba a parte de tecnologia, informação, geração de emprego e tudo que está relacionado aos produtos de defesa.

O Secretário da SEPROD, Marcos Degaut, ressalta que é necessário estabelecer nova agenda para o setor de Indústria de Defesa, adequando-a aos novos tempos. “É preciso semear hoje o que queremos colher no futuro. O aperfeiçoamento de indústrias de interesse de defesa é fundamental para que possam sustentar os projetos estratégicos das Forças Armadas”, afirma.

Coordenação

Responsável por planejar, coordenar e executar estratégias e diretrizes relacionadas à Base Industrial de Defesa, a SEPROD constrói importantes parcerias com mais de 1.100 instituições ligadas ao setor da indústria em todo o País. A BID gera, em média, 1,3 milhão de empregos diretos e indiretos e movimenta cerca de R$ 200 bilhões na economia nacional, representando 4% do Produto Interno Bruto Nacional (PIB).

Dentre as entidades parceiras da BID estão a Confederação Nacional das Indústrias (CNI) e oito de seus conselhos estaduais (BA, GO, MG, PR, PE, RJ, RS, SC e SP); a Agência Brasileira de Promoção e Exportações (Apex); a Associação Brasileira da Indústria de Máquinas e Equipamentos (Abimaq), a Associação Brasileira das Indústrias de Materiais de Defesa e Segurança (ABIMDE); o Sindicato Nacional das Indústrias de Defesa (SIMDE), entre outras.

A parceria da SEPROD com a CNI resultou na criação, em março deste ano, do Curso "Economia de Defesa". Destinado àqueles que desejam ampliar o conhecimento sobre o setor de Defesa no Brasil e no mundo, aborda temas como: a BID e a economia de defesa, a indústria de defesa no Brasil, as características do mercado de defesa no Brasil e no mundo, Projetos Estratégicos das Forças, e a Secretaria de Produtos de Defesa e fomento da BID.

Produtos Estratégicos

As parcerias estabelecidas por meio da BID possibilitam alavancar diversos projetos estratégicos, de forma a atender às necessidades operacionais e de modernização dos produtos de defesa empregados pelas

Forças Armadas. O domínio de novas tecnologias e o aumento da produtividade e da diversidade na indústria brasileira asseguram a capacidade operacional das Forças e a consolidação da Política de Defesa e de Segurança Nacional.

Entre os diversos projetos estratégicos de defesa em desenvolvimento destacam-se: Fragatas Classe "Tamandaré", desenvolvido pela Marinha, Programa Guarani, a cargo do Exército, e KC-390 Millennium, da Aeronáutica.

Fragatas Classe "Tamandaré"

O programa prevê a aquisição de quatro navios versáteis, dotados de elevado poder de combate, capazes de proteger a extensa área marítima brasileira, com mais de 5,7 mil km² - "Amazônia Azul"; realizar operações de busca e salvamento; monitorar e combater ações de poluição, pirataria, pesca ilegal, dentre outras ameaças; e atender aos compromissos internacionais assumidos pelo Brasil.

Programa Guarani

Concebido para equipar o Exército Brasileiro com moderna família de blindados sobre rodas que atendam às exigências doutrinárias e de cumprimento das missões de defesa externa e proteção da sociedade brasileira. Além da proteção blindada, o Guarani traz valores agregados, como os sistemas de armas, de comando e controle e de comunicações.

KC-390 Millennium

Maior aeronave militar já produzida no Brasil, o KC-390 Millennium consegue aliar a emissão de requisitos e de pacotes de offset de maneira a impulsionar diversos setores da Base Industrial de Defesa. Ao todo, mais de 50 empresas brasileiras participam do projeto, que conta ainda com a colaboração da Argentina, de Portugal e da República Tcheca. A aeronave tem capacidade para transportar tropas e carga por todo o território nacional, reabastecer outras aeronaves em voo, realizar evacuação aeromédica, lançar paraquedistas e combater incêndios.

Além dos produtos operacionais de defesa, há outros setores estratégicos, nas áreas espacial, nuclear e cibernética, que se tornaram campos prioritários para o Ministério da Defesa. O que reforça a importância do desenvolvimento tecnológico e industrial para o fortalecimento da Defesa Nacional.

30. Acordo de cooperação com EMBRAPII fortalece desenvolvimento da BID

25.05.2021

Ministério da Defesa

https://www.gov.br/defesa/pt-br/centrais-de-conteudo/noticias/acordo-de-cooperacao-com-embrapii-fortalece-desenvolvimento-da-bid

Brasília, 25/05/2021 – O fortalecimento da Base Industrial de Defesa (BID) ganha novo impulso por meio de acordo de cooperação entre a Secretaria de Produtos de Defesa (SEPROD), do Ministério da Defesa, e a Empresa Brasileira de Pesquisa e Inovação Industrial (EMBRAPII), vinculada ao Ministério da Ciência, Tecnologia e Inovações. O evento de assinatura ocorreu no salão nobre da Pasta, na tarde da segunda (24),

com a presença dos Ministros da Defesa, Walter Braga Netto, e da Ciência, Tecnologia e Inovações, Marcos Cesar Pontes.

A intenção é possibilitar maior envolvimento de empresas, em especial as da BID, no desenvolvimento de projetos de interesse da Defesa nas etapas de pesquisa, produção, distribuição e manutenção de produtos estratégicos de defesa.

O Ministro da Defesa destacou que a iniciativa contribui para que o 3º Objetivo Nacional, constante na Política Nacional de Defesa, seja atingido. “O estimulo à pesquisa e a busca do desenvolvimento de tecnologias são aspiração de qualquer país para seu desenvolvimento e podem alavancar a geração de empregos, elevando a renda da população brasileira e atraindo investimentos, gerando círculo virtuoso na economia nacional”, disse.

O Ministro Marcos Pontes destacou a importância da parceria entre os ministérios. “Esse é um momento muito especial. Eu costumo falar que o Ministério da Ciência e Tecnologia e Inovações é uma ferramenta que auxilia o desenvolvimento de políticas públicas em todos os outros ministérios, e hoje é a concretização de uma dessas realizações, agora com a Defesa”, completou.

O Secretário da SEPROD, Marcos Rosas Degaut Pontes, explicou que o acordo explora o conceito de Tríplice Hélice, reunindo segmentos do governo, do setor privado e das academias, em atendimento a demandas específicas da BID e da própria Defesa. “A parceria com a EMPRAPII é de extrema relevância para o Ministério da Defesa no fomento ao desenvolvimento de inúmeros projetos e produtos com alto valor agregado, abrangendo todo o espectro da cadeia científica, tecnológica e de inovação da BID”, detalhou.

O acordo busca, também, identificar modelo específico que permita que as Instituições de Ciência e Tecnologia (ICTs) militares participem do desenvolvimento de projetos de interesse da Defesa em parceria com Unidades EMBRAPII e com outras empresas, especialmente as que pertencem à BID.

O evento contou ainda com a presença do Secretário-Geral do Ministério da Defesa, Sergio José Pereira, do Chefe do Estado-Maior Conjunto das Forças Armadas, Tenente-Brigadeiro do Ar Raul Botelho, do Diretor do Departamento de Ciência, Tecnologia e Inovação (DECTI), General de Divisão Luis Antônio Duizit Brito, do Diretor-Presidente da EMPRAPII, Jorge Almeida Guimarães, e demais autoridades militares e servidores da SEPROD, além de convidados.

31. Comitiva do Ministério da Defesa visita fábrica de armamentos Taurus, no Rio Grande do Sul

09.06.2021

Ministério da Defesa

https://www.gov.br/defesa/pt-br/centrais-de-conteudo/noticias/comitiva-do-ministerio-da-defesa-visita-fabrica-de-armamentos-taurus-no-rio-grande-do-sul

Brasília (DF), 09/06/2021 – Nesta quarta-feira (09), a comitiva liderada pelo Ministro da Defesa, Walter Souza Braga Netto, visitou a fábrica de armamentos Taurus, em São Leopoldo, no Rio Grande do Sul. O grupo percorreu as instalações e conferiu os processos produtivos e administrativos da companhia.

Essa é a primeira de uma série de visitas que a comitiva do Ministério da Defesa fará a empresas que compõem a Base Industrial de Defesa (BID). Na ocasião, o Ministro Braga Netto ressaltou que a Taurus representa um exemplo de sucesso para a BID, em um mercado onde o alto valor tecnológico agregado é uma característica marcante. “A presença da empresa em mais de 100 países demonstra a sua inegável capacidade de inovação, competividade de preços e competência em manter uma cadeia de suporte global”, disse.

O ministro afirmou, também, que o fortalecimento da BID é um objetivo estratégico do Ministério da Defesa e um importante vetor para o desenvolvimento da economia brasileira. O setor conta com mais de 1,1 mil empresas, representa 4,5% do Produto Interno Bruto (PIB) e gera 290 mil empregos diretos e 850 mil indiretos.

Em visita à Fábrica, a comitiva conheceu o portfólio de produtos da empresa, composto por armamentos que atendem aos mercados civil, militar e policial. Acompanhou, ainda, testes de tiro e verificou os processos de qualidade e protocolos de aceitação aos quais os produtos são submetidos antes de serem comercializados.

O CEO Global (Chief Executive Officer) da Taurus, Salesio Nuhs, destacou a importância de o País ter empresas estratégicas de defesa com produtos e processos com tecnologia sob domínio nacional. “Todos os produtos e processos aqui apresentados são desenvolvidos com tecnologia própria, pelo nosso Centro Integrado de Tecnologia e Engenharia Brasil/Estados Unidos”, ressaltou Nuhs.

Integraram a comitiva do Ministério da Defesa o Diretor do Departamento de Ciência, Tecnologia e Inovação (DECTI), General de Divisão Luis Antônio Duizit Brito; o Diretor do Departamento de Financiamentos e Economia (DEPFIN), Major-Brigadeiro Intendente Marcos Aurélio Pereira Silva; o Comandante Militar do Sul (CMS), General de Exército Valério Stumpf Trindade; e o Comandante da 3ª Região Militar, General de Divisão Riyuzo Ikeda.

32. El Ejército Brasileño recibe un sistema móvil de rastreo para evaluar misiles y cohetes

15.06.2021

Defensa.com

https://www.defensa.com/brasil/ejercito-brasileno-recibe-sistema-movil-rastreo-para-evaluar

El Centro de Evaluación del Ejército de Brasil (CAEx) recibió el Sistema de Seguimiento de Dispositivo de Vuelo Transportable (STREV), capaz de rastrear varios tipos de municiones, dotando al Ejército de Brasil de una nueva capacidad. El equipo es parte del programa estratégico ASTROS 2020 del Ejército (PEE ASTROS 2020).

El objetivo principal del sistema es apoyar la investigación, desarrollo y evaluación del misil de crucero táctico MTC-300 y el cohete guiado SS-40G, proyectos de PEE ASTROS 2020, y de otros proyectos de investigación y desarrollo (I + D) de dispositivos en -Vuelo de la Base Industrial de Defensa y Seguridad (BIDS) y de las Fuerzas Armadas.

El 9 de junio concluyó la fase de Factory Acceptance Testing (TAF) en São Bernardo do Campo , en las instalaciones de la empresa Omnisys Engenharia, cuya implementación, en CAEx, es parte del proyecto de instrumentación para el campo de instrucción2 (PICI) del programa estratégico ASTROS 2020 del Ejército. El TAF tuvo como objetivo verificar un conjunto de requisitos a nivel de componente, subsistema e integración, realizados antes de las pruebas de aceptación de campo del sistema, con el fin de incrementar su funcionamiento e integración.

Luego de la finalización exitosa de los ítems de aceptación, el STREV fue trasladado por carretera, los días 10 y 11 de junio, desde la empresa contratada, en São Bernardo do Campo, a las instalaciones de CAEx, donde se llevará a cabo la primera fase de pruebas de aceptación en campo (TAC) del sistema, cuyo objetivo es la verificación de requisitos y efectividad sistémica en los dispositivos de seguimiento en vuelo.

El transporte fue realizado por personal militar del CAEx y apoyado por el 8 ° Batallón de Policía del Ejército (8 ° BPE), de São Paulo, por la Academia Militar Agulhas Negras (AMAN), de Resende y por el 11 ° Batallón. de la Policía del Ejército (11º BPE), de Río de Janeiro. Durante las pruebas de campo, se espera que se lleve a cabo la última fase académica en operación y mantenimiento de STREV, para capacitar al personal en el funcionamiento del sistema en futuras misiones requeridas por el Programa ASTROS 2020 y otros. (Javier Bonilla)

33. Centro de Estudos Estratégicos discute bens sensíveis e produtos de Defesa

16.06.2021

Exército Brasileiro

https://www.eb.mil.br/web/noticias/noticiario-do-exercito/-/asset_publisher/MjaG93KcunQI/content/id/13469714

Brasília (DF) – Na tarde do dia 9 de junho, o Centro de Estudos Estratégicos (CEEEx), subordinado à 3ª Subchefia do Estado-Maior do Exército, promoveu workshop com o tema "Regimes internacionais relativos a bens sensíveis e produtos de defesa: limitações e oportunidades", a fim de debater em que medida a adesão do Brasil aos tratados de controle de armamentos, convencionais ou não, traz benefícios – ou restrições – para a aquisição de material de emprego militar.

A cada ano, os gastos mundiais com defesa, assim como o incremento de novas tecnologias agregadas ao desenvolvimento de material de emprego militar têm se intensificado. Segundo dados do Stockholm International Peace Research Institute (SIPRI), houve um incremento de 2,6% nos gastos militares globais de 2019 a 2020. Os cinco países que mais investiram nessa área, em 2020, foram os Estados Unidos, a China, a Índia, a Rússia e o Reino Unido, que juntos responderam por 62% dos gastos militares globais.

Dentro desse contexto e com base na economia de Defesa, o evento propiciou um espaço para a troca de ideias entre expositores e participantes a respeito das limitações e das oportunidades relativas à aquisição de produtos de defesa frente aos regimes internacionais que se vinculam à segurança internacional e à defesa nacional.

Além dos membros do CEEEx e convidados, participaram como expositores: o Chefe da Divisão de Desarmamento e Tecnologias Sensíveis (DDS) do Ministério de Relações Exteriores, diplomata Claudio

Medeiros Leopoldino e o Coordenador-Geral de Bens Sensíveis do Ministério da Ciência, Tecnologia e Inovação (MCIT) e médico, Dr. Sérgio Antônio Frazão Araújo. Contribuíram como interlocutores convidados a pesquisadora do CEEEx, Pós-Doutora em Ciências Militares (ECEME), Fernanda das Graças Corrêa, e o ex-pesquisador do CEEEx e professor da Escola Superior de Guerra, Doutor em Relações Internacionais (USP) Peterson Ferreira da Silva.

Seguindo o protocolo de medidas de prevenção à covid-19, o evento foi restrito a um pequeno público.

34. Nigerian Air Force to Receive 12 A-29 Super Tucano Aircraft by October 2021

28.05.2021

Defense World

https://www.eb.mil.br/web/noticias/noticiario-do-exercito/-/asset_publisher/MjaG93KcunQI/content/id/13285267

The Nigerian Air Force (NAF) will receive the full order of 12 A-29 Supper Tucano aircraft by October 2021 from Embraer Defence Security Incorporated (EDSI).

Six of the aircraft are scheduled to be delivered by July and the remaining six in October this year, Colonel Authur Ford of the U.S. Air Force Fighters and Advance Aircraft Directorate stated while briefing members of the Nigerian National Assembly (NASS) Joint Committee on Defence and Air Force (JCDAF) who are currently visiting EDSI facilities in Jacksonville, Florida, a NAF statement said Friday.

The NAF posted photos of the aircraft with members of the JCDAF posing before them at the EDSI production facility.

Colonel Authur Ford stated that 10 out of the 12 aircraft were ready for delivery while 2 were undergoing modification and integration to NAF specific operational configuration.

Senator Michael Nnachi who leads the JCDAF queried the long duration of time from the date of full payment to expected date of delivery, which he estimated to be between 3 to 4 years. In response, Col Ford informed the team that the long duration was due to the challenges of configuring the aircraft to fit NAF's required specifications.

In February 2019, EDSI and its partner Sierra Nevada Corporation (SNC) announced they were awarded a contract to deliver 12 A-29 Super Tucano light attack aircraft to the Nigerian Air Force.

Earlier, in November 2018, the Pentagaon announced a $329,076,750 contract action (for 12 Nigerian A-29 Super Tucano) was approved with a not-to-exceed amount of $344,727,439 to include a Forward Looking Infrared System for six of the aircraft.

The contract for the Nigerian Air Force includes ground training devices, mission planning systems, mission debrief systems, spares, ground support equipment, alternate mission equipment and contiguous U.S. interim contractor support.

Nigerian media has reported that the full payment of $344.7 million has already been transferred to the contractor.

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