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*in*FOCUS

QUARTERLY

Defense: Rising Challenges and Changing Strategies



James Jay Carafano on U.S. Military Challenges | **Jeremiah Rozman** on Chinese Competition | **Frederico Bartels**, **Patty-Jane Geller**, **Thomas Spoeher**, **John Venable**, and **Dakota Wood** on the U.S. Defense Budget | **Jeffrey Green** on Rare Earths Production | **Stephen D. Bryen** and **Shoshana Bryen** on COVID-19's Military Impact | **Daniel Gouré** on Japanese Missile Defense | **Zak Doffman** on Israel's Connected Military | **Gary Anderson** on NATO Strategy in the Baltics | **Michael Sullivan** and **Jarvis D. Lynch, Jr.** on Modernizing the Marines | **Steven Metz** on Changes to the Army | **J. Roy Robinson** on the National Guard | **Shoshana Bryen** reviews *Young Patriots*

Featuring an Interview with Senator **Tom Cotton**

LETTER FROM THE PUBLISHER

The Chinese government withheld information about the origin, nature, spread, and volatility of COVID-19 and arrested and “disappeared” brave Chinese people who tried to tell the truth. Many Americans now see the Chinese government as an adversary of the Free World. They are right. The Fall 2020 issue of *inFOCUS* is about meeting the new challenge.

Don’t miss our interview with the extraordinary Sen. Tom Cotton. In his inimitable way, his thoughts travel around the world, not only pointing out pitfalls, but offering perspective and solutions.

But first, a question. Was the virus a Chinese bio-weapon? Former defense official Stephen Bryen and JPC Senior Director Shoshana Bryen posit that if it was, it wasn’t very effective. But it gave China a remarkable look at our ability to cope under duress – and that picture isn’t pretty. On the other hand, we learned things too.

James Carafano and Jeremiah Rozman address the new Cold War and America’s use of power abroad. Jeffrey Green has good news on the Rare Earth Elements front. The role of our allies Japan and Israel are covered by Daniel Gouré and Zak Doffman. And Gary Anderson reminds us that we can’t forget

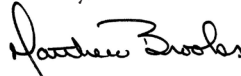
Russia is still lying in wait for a chance to make trouble, even as Putin finds Challenges in his “near abroad.”

The defense budget will drive our future capabilities. The combined skills of Frederico Bartels, Patty-Jane Geller, Thomas Spoeher, John Venable, and Dakota Wood make the budget understandable. Changes to the Marine Corps, Army and National Guard are addressed by Jarvis Lynch and Michael Sullivan, Steven Metz, and Roy Robinson, respectively.

Finally, Shoshana Bryen reviews *Young Patriots* by Charles Cerami. As American cities and institutions are attacked by violent gangs intent on their destructive version of “revolution,” remember that America’s Founders were, in fact, constructive revolutionaries – building, not destroying, and vesting power in the people.

If you appreciate what you’ve read, I encourage you to make a contribution to the Jewish Policy Center. As always, you can use our secure site: <http://www.jewishpolicycenter.org/donate>

Sincerely,



Matthew Brooks,
Publisher



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The Military Risks in America's Future

by **JAMES JAY CARAFANO**

If there are wars in the near term, they will be wars of choice. They will be in places we weren't looking for wars. They won't be easy wars to win. They will make the world more dangerous.

Great power competition is more than just a bumper sticker everybody is slapping on everything at present. This framework accurately enough describes the geo-political struggle going on in the world today. States trying to expand their spheres of influence bump into the interests of other states. Those confrontations

there are three parts of the world that are crucial to the U.S. – Europe, the Greater Middle East, and Asia.

They are three giant lily-pads that connect America to the rest of the world. In addition, the great “global commons” that allow the U.S. to traverse the world (sea, air, space, and cyberspace) are anchored in these lands. In short, regional peace and stability in Europe, the Middle East, and Asia is important to the United States. These parts of the world either facilitate America's persistent

Russia, another trade deal with China, or the denuclearization of North Korea, don't expect the underlying antipathies and distrust to dissipate overnight. Absent massive political change, the competitive space looks set for a while.

In terms of national security and armed conflict, what is notable about America's competitors is the one goal they all share. Each wants to win without fighting. None of them desire or foresee a direct debilitating war with the United States anytime soon. Rather each seeks ways to distract, diminish or disperse American power without risking an escalating confrontation that leads to a direct test of arms.

Further, these powers have limited interest and capacity to cooperate in the pursuit of their goal. True, they do find opportunities to make common cause. There is, for example, coordinated action in circumnavigating sanctions, leveraging disinformation, and taking joint action in international forums, such as the United Nations Security Council. But there are limits to this collaboration in part because in some spheres the powers are competing with each other as well. In part, because they lack capacity to do much to assist each other. And because they are averse to taking on additional risk.

Yet, each individually represents a real threat to American interests. Additionally, in total they comprise a global rivalry that cannot be ignored or wished away.

In terms of armed fighting, surrogate and indirect action remain the weapon choice for undermining American power. Thus, if the U.S. does get engaged in a conflict in the near term, it is less likely that it will be against other great powers.

In managing and globally shifting U.S. military power, expect alliances and strategic partnerships to become more, not less, relevant to America.

create friction and conflict threatening to undermine global institutions, destabilize regional blocs and hazard global peace.

To be accurate, not every country involved in the competition is “great.” China is still short of superpower status. Countries such as Iran, India, Japan, and Russia are regional forces. Europe bobbles along. Nations like North Korea don't have much more strength than the capacity to disrupt the peace of others. Arguably, the United States is the only player with unquestioned persistent sustainable global reach. That said, “great power competition” is the term of art for our times. So, rather than quibble, let's just go with it.

From the U.S. perspective, how we thrive amongst our rivals remains a challenge. America is a global power with global interests and responsibilities. Ignoring the competitive pressures from others is not an option. In particular,

presence or provide the means to get to the places Americans need to go to protect U.S. vital interests.

In this competition, the great threats to regional peace and stability, from the U.S. perspective, are Russia, China, Iran, and North Korea. This isn't new. Despite their many differences presidents Bush, Obama, and Trump all had the same bad guy list. Granted each had different ways of addressing these competitors. Each also had other enemies on their list. Still, the fact that they had a common core of concern is noteworthy. America, and indeed most of the free world, has not had a consistent threat perception since the end of the Cold War.

Further, the antagonisms that separate the U.S. and these other powers aren't likely to change in the foreseeable future. Our interests are antithetical. Even if in the future ways are found to ameliorate competition, such as arms control with

Rather, America would find itself immersed in wars either instigated directly or supported indirectly by an adversarial power. These wars could be intentionally engineered to entrap the U.S. in armed conflict or adversaries might seek to exploit an on-going confrontation in which the U.S. has become embroiled.

In addition, these struggles would likely be conflicts of choice. They would not be wars in which the U.S. felt com-

Robust American armed forces are an important element of conventional deterrence. With the capacity to fight in two places at once, the U.S. could discourage adversarial powers from trying to take advantage of an American engagement in one theater to move against U.S. interests in another.

The U.S. military, however, is under-sourced to simultaneously protect all of America's vital interests. Further, the

strategic partnerships to become more not less relevant to America. In addition to NATO, the United States will likely develop security frameworks for both the Middle East and the Indo-Pacific. No doubt these frameworks will be anything but carbon copies of the trans-Atlantic alliance. The theaters are very different, and the U.S. will have to develop security architectures appropriate for each. Nevertheless, America's strategic partnerships are likely to mature in the next decade.

It is not just security needs that will foster stronger alliances in the long term. The dividing line between the free and the not-free world is going to become starker. Nations that share a commitment to freely elected governments, free enterprise and human rights will have to bind themselves more closely together in their own self-interest. Countries that don't necessarily share all these values, but seek the umbrella of security that the free world can offer, will join their side as well. The upshot is the U.S. could well have more security partners – not fewer.

Nurturing alliances will actually require the U.S. to deploy and sustain more military power abroad not less. Partners will seek physical guarantees including the forward basing of U.S. forces for conventional deterrence and joint operations.

American forward presence, however, is going to require equitable burden-sharing making political-military affairs, diplomacy and coalition relations as critical as bases and operational exercises.

pelled to act to protect itself. Rather, these would be conflicts in which America opted to intervene to further policy goals that did not directly impact vital interests. In other words, in any likely scenario, the U.S. would have the option of not intervening – or adopting means other than armed conflict to respond to the crisis or threat.

Further, since America is a global power, the conflict could potentially be anywhere in the world. Additionally, the character of the warfare could be anything from a confrontation at sea with maritime militias, to squaring off in the Arctic, to battling insurgents, hunting terrorists, or fighting in jungles, mountains, cities, or deserts.

Though these might be lesser wars, they might well not be easy ones. America's competitors will work to make them harder for us to prevail. In addition, the U.S. might find itself fighting in places where winning just isn't easy.

In any future major conflict, the U.S. would likely have to worry about becoming overcommitted. Ideally, the American military ought to have the capacity and capability to sustain two major armed conflicts, as well as to ensure continued freedom of the global commons.

American military globally sources for all major deployments. In other words, the Pentagon could well draw forces from any theater in time of conflict to support operations in another theater. As a result, the U.S. potentially faces creating new risks when the Pentagon moves forces to address other dangers.

Even though military readiness and modernization have improved over the last four years, there is scant likelihood

In the end, military power will be an essential but insufficient instrument for the U.S. to survive and thrive in an era of great power competition.

that the American military will be able to establish a demonstrably stronger military balance against its potential collected adversaries in the near term.

If the U.S. is going to maintain conventional deterrence in this phase of the great power competition, Washington is going have to demonstrate restraint and prudence in deciding where it accepts active military engagements.

In managing and globally shifting U.S. military power, expect alliances and

American forward presence, however, is going to require equitable burden-sharing, making political-military affairs, diplomacy, and coalition relations as critical as bases and operational exercises.

Strategic arms competition will also be an important part of this future. An unconstrained arms race is less likely. More likely is that the U.S., Russia and China will continue to view strategic arms as a safety net to keep extreme competition in check. Nuclear modernization, missile



The aircraft carrier USS Ronald Reagan transits the Pacific Ocean with ships assigned to Rim of the Pacific (RIMPAC). (Photo: U.S. Navy)

defense, and hypervelocity weapons will certainly be seen by all sides as part of maintaining a healthy, credible deterrent.

Further, it is virtually certain that competition will spill into every domain of potential conflict. Armed conflict might not even be the most prominent. International organizations and agreements, for example, have emerged as means not for harmonizing international norms, but as another battleground of great power competition. The confrontations between powers seeking to use global institutions and treaties as a means to advance their interests will certainly intensify in the years ahead. The war over control of international organizations may become more intense than actual wars.

Additionally, economic and technological competition have already emerged as a significant factor that will affect the future balance of power. This area, not physical wars, could well be the decisive field of conflict in the near future. Without question, key areas of rivalry will include the race to develop and exploit 5G telecommunications, quantum computing, bio-technology, and artificial intelligence.

In the end, military power will be

an essential but insufficient instrument for the U.S. to survive and thrive in an era of great power competition. Recognizing that the competition is going to be intense, long-term, and multifaceted requires America to adopt strategies and policies appropriate to the nature of the competition it faces.

Prevailing in long-term struggles demands that the competitors spend equal effort in protecting the sources of power that allow them to successfully compete, as they do trying to diminish and defeat their competitors. This will require the U.S. not only to refrain from taking offensive measures that undermine American competitiveness, but also make deliberate efforts to nurture and advance its competitive advantages.

The U.S. will have to maintain robust military capability, not only to deter regional conflict and keep the global commons open, but also to fight the wars of choice it may elect to undertake. This will require sufficient resources to pay for current operations, maintain trained and ready forces, and continue to modernize for the future all at the same time. Additionally, the U.S. will have to have sufficient capacity and capability to operate in

all the potential domains of conflict – sea, undersea, space, cyberspace, on the land, and in the air.

At the same time, the United States must be able to grow and strengthen its economy, sustaining free and open markets which promote prosperity and innovation, while making the market more resistant to malicious competition from adversarial powers.

Finally, the freedom and openness of American society is a relative strength in global competition and must be preserved. Strong, prosperous, free societies are more resilient and more likely to persevere over the long term.

Strategies and policies aimed to keep America free, safe, and prosperous will provide the armed forces needed to meet the demands of great power competition. In addition, they will ensure America's hard power is employed in an integrated and complementary manner to address the long-term challenges the United States will confront in the trying times ahead.

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Winning the New Cold War

by JEREMIAH ROZMAN

China's rise is the greatest threat to U.S. security, interests, and values since the Cold War. Its aggressions include breaching international law to tighten control over Hong Kong, disputes with Japan, Taiwan, India, Vietnam, the Philippines, Malaysia and other countries, and terraforming and militarization in disputed waters in the South China Sea.

China's leadership sees the U.S. as an enemy to be overcome on the path to global domination. Chinese military documents suggest a primary strategic goal to capture Taiwan. A high-ranking Chinese general warned that China will militarily conquer Taiwan if it cannot dominate it by other means.

China spends four times more than Russia on its military. U.S. allies in Asia spend half of what its European allies spend on their defense. The military threat from China to its region is much greater than the sizable threat that Russia poses in Europe, while China's economic ability to carry out sustained action far outpaces Russia's.

China is conducting the largest military expansion and modernization in its history. Its defense spending rose by 85 percent from 2010-2019 while U.S. defense spending fell by 15 percent in the same period. Adjusting for labor costs, China's defense budget in 2017 was \$467.4 billion. Considering its less logistically demanding mission and lower personnel costs, China's defense spending closely rivals the U.S.

■ Why Compete?

China is the only country with the economic and technological base to build a military capable of competing with the U.S. globally. Its leader wants a military capable of defeating the U.S. by 2050. It is already stronger than Russia in virtually every respect other than its nuclear arsenal. Through espionage, it has achieved parity and beyond on critical capabilities

like quantum computing, hypersonic weapons, and artificial intelligence.

As China rises, the international power structure mirrors historical moments of violent transition. The belief that international institutions can forestall conflict has dominated American foreign policy discourse in recent decades. In reality, illiberal regimes have captured and used institutions to advance their own agendas and accrue power, none more adeptly than China. The devastating impact of China's capture of the WHO in the wake of COVID-19, exposes the folly of outsized reliance on international bodies.

As the U.S. deliberates a more confrontational policy towards China, it should answer three questions:

- Is China poised to overtake the U.S. in economic and military power?
- Will China use its superiority to expand at the expense of the U.S.?
- Is PRC global leadership something that the U.S. can abide, comparable to Great Britain peacefully ceding global preeminence to the U.S. during and after World War II?

The answers to the first two questions are clearly yes. China's power is rising faster than American power, although the rate depends on complex factors, including how the U.S. chooses to compete. China intends to abrogate long-standing treaties, by force if need be. Regarding the third question, U.S. security and the global order that undergirds the American way of life depend upon U.S. power. Because China is rising, intends to overturn the world order, and this threatens vital U.S. interests, the U.S. faces a Cold War with China and it must compete to win.

■ America is Unprepared

The Cold War was ultimately decided by greatly superior U.S. economic strength which the USSR. could not

match. Not so for China.

Unlike currently with China, during the Cold War there was minimal interconnectivity between the U.S. and its rival. The U.S. did not rely on the USSR for inputs critical to its defense and healthcare. Allied communications were not conducted over Soviet telecommunications infrastructure. Hundreds of thousands of Soviets were not studying physics, chemistry, biology, and engineering in U.S. universities. The USSR lacked the leverage to coerce American businesses and news and entertainment media to self-censor. Moscow did not hold vast quantities of U.S. sovereign debt. Finally, the "Iron Curtain" that separated the U.S. from the Soviet Union is more like a one-way mirror for China. China can access U.S. institutions, while selectively closing its population to American influence.

Post-Cold War triumphalism partially explains the failure to compete. American political scientist Francis Fukuyama referred to the U.S.-led post-Cold War order as "the end of history," capped by the global spread of capitalism and democracy. But China, led by its Communist Party, rose with astonishing speed. In 2000, its GDP was less than 12.5 percent of America's. By 2014, China had overtaken the U.S. as the world's largest economy on a Purchasing Power Parity basis.

The U.S. recognized the USSR as a strategic rival early on, even as it allied with it against Nazi Germany. In 1946, U.S. diplomat George Kennan articulated this in his "long telegram" from Moscow to the State Department. Kennan's views, summarized as "containment" of the Soviet Union, became the cornerstone of U.S. foreign policy for the next five decades. It dominated diplomacy, defense, economic competition, and even popular culture. There is no parallel for China. There is no anti-PRC equivalent to the

anti-Soviet series U.S. television cartoon comedy “Rocky and Bullwinkle,” for example. Indeed, many Hollywood producers, corporations and even sports leagues, bow to Chinese censorship demands.

The U.S. leads the world in innovation and growth. Yet, it faces difficulty transforming economic might into military power because budgetary stability, needed for long-term modernization and readiness, is subject to constant internal political competition. China pushes sustained military aggrandizement and investment in critical emerging technologies by executive fiat. It relies on espionage to offset its innovation disadvantages.

Chinese espionage, rampant for decades, has greatly increased in the cyber era. In 2018, the U.S. Department of Justice announced the China Initiative to protect against espionage and warned of China’s political influence campaign. The Defense Department’s Protecting Critical Technology Task Force has uncovered thousands of cases of data theft since its establishment in 2018. Its director stated that the U.S. has unwittingly become China’s research and development base.

Earlier this year, the U.S. shuttered the Chinese consulate in Houston, accusing it of espionage, and cut the number of Chinese diplomats to reduce the counterintelligence burden. The FBI opens a new Chinese-related case on average every 10 hours.

China also exploits the openness of U.S. universities. Harvard University’s chemistry chair was arrested for failing to disclose Chinese funding, a UCLA professor was convicted over a plot to illegally obtain dual use microchips. The Trump administration cancelled the visas of approximately 3,000 Chinese graduate students tied to universities affiliated with China’s army.

■ *Made in China Health Care*

Several decades ago, most U.S. medical products were manufactured domestically. China now produces about 90 percent of the chemicals used in generic American drugs, and dominates protective personal equipment export.

Reliance on an adversary is risky. If

U.S. personnel were to be wounded in an altercation with China, their treatment might depend upon ingredients made in China. This mirrors the absurdity that U.S. military hardware requires materials from China. U.S. policymakers also fear that China could curb exports in the midst of a pandemic. The U.S. should increase imports from friendly nations as it rebuilds its domestic industry.

President Trump signed an executive order in 2020 to boost domestic medical production. Congress should pass tax and regulatory laws to make U.S. manufacturing more competitive. Restoring tax exemptions for Puerto Rico, with its relatively low labor costs and existing medical industry infra-

structure, could increase domestic sourcing and rebuild its once flourishing medical supplies industry. Continuous manufacturing and 3D printing could also help U.S. pharmaceutical manufacturing competitiveness. Some drug makers are already moving in this direction with FDA support.

■ *Chinese 5G Proliferation*

Many U.S. allies and partners have 5G telecommunications networks being built at least partially by the Chinese communications giant Huawei. Security risks include vulnerability to hacking and a backdoor for data-gathering on behalf of the Chinese government. The U.S. has warned allies that it would be more difficult to partner with countries that use Huawei.

The “Five Eyes” intelligence-sharing allies – the United Kingdom, Canada, Australia, and New Zealand, with the United States – generally appreciate the risks that Huawei poses for allied interoperability. Australia shut out Huawei. New Zealand originally rejected a request from its largest telecom carrier to use Huawei equipment, but has since reversed course. Canada’s stance is uncertain. The United

Kingdom banned Huawei from its 5G networks following U.S. pressure.

The European Commission voiced concerns but estimated that a ban would add \$62 billion to the cost of 5G in Europe and delay it by 18 months. Poland is considering excluding Huawei. The Czech Republic is considering bans or cuts. France and Italy took steps to exclude Huawei. Germany is leaning toward allowing Huawei to build part of its 5G network, despite U.S. warnings that this could harm intelligence sharing. China’s ambassador threatened retaliation if Germany excludes Huawei, noting the millions of vehicles German automakers sell in China.

...illiberal regimes have captured and used institutions to advance their own agendas and accrue power, none more adeptly than China.

Japan banned Huawei from government contracts in 2018. India’s reluctance to block Huawei is a major setback, but the U.S. might be able to leverage India’s rising tensions with China following recent border skirmishes.

In the Middle East, the United Arab Emirates announced that it would deploy a 5G network built by Huawei. Another U.S. partner, Israel, has never had China in its high-speed communications network.

Since 2018, the U.S. government has introduced export controls, bills restricting federal government contracts, and warned allies and partners over reduced defense interoperability. These warnings carry weight since the U.S. is the military backbone of European, Asian, and Middle Eastern collective defense.

Pressure and restriction are not enough, however. Huawei is currently the best provider of 5G capability per cost. The Swedish company Ericsson is a distant second, and Nokia is third. The U.S. should work with partners to develop a viable alternative to Huawei. To this end, the Trump administration established a 5G strategy in March 2020.

■ **Cutting Reliance on China**

The oil shocks of 1973 exposed U.S. vulnerability to international economic threats and diplomatic blackmail. Their silver lining was that they forced Western companies to diversify petroleum sources. China's actions during the COVID-19 pandemic might have a similar effect.

Democratic governments can create incentives for companies to withdraw from China. Japan's COVID-19 recovery package requires companies receiving aid to withdraw manufacturing from China. The U.S. could enact similar policies.

President Trump's second term agenda, should he be reelected, has among its goals; tax credits for companies that bring back jobs from China, expensing deductions for essential industries such as pharmaceuticals that return manufacturing to the U.S. and banning companies that outsource to China from federal contracts. The U.S. should also increase bilateral trade worldwide and promote a multilateral trade structure that replaces the scrapped Trans Pacific Partnership. A new version should adequately protect U.S. manufacturing.

■ **Competing for the Narrative**

The U.S. government unhesitatingly blamed Soviet incompetence and perfidy for the Chernobyl disaster. This shook faith in the USSR, and hastened its collapse. COVID-19 could be the PRC's "Chernobyl," but domestic politics have kept America from publicly placing comparable blame on China. Meanwhile, the European Union remains reluctant to confront it.

PRC leadership understands the importance of the information sphere. An internal Chinese report warned that in the pandemic's wake, Beijing faces hostility comparable to the aftermath of the Tiananmen Square massacre. Global backlash includes calls for inquiries and reparations and growing mistrust of China in Europe and Africa. British ministers publicly blamed China for its cover up. Germany's largest newspaper sent Beijing an itemized bill for damages, and Australia called for an inquiry into China's



Chinese soldiers marching in front of Tiananmen, Beijing, China. (Photo: Songquan Deng)

mishandling of COVID-19.

Compounded with China's increasing aggression and human rights abuse, the COVID-19 pandemic could foster a global consensus on the need to compete with China. This requires the U.S. to counter propaganda, condemn abuses (including the forced sterilization of members of the Turkic Muslim Uyghur minority), and unwaveringly support liberty and partners under threat. Senator Ted Cruz's (R-TX) bill to bar companies benefiting from slave labor is a good start, as is the State Department's groundbreaking articulation of the illegality of China's claims in the South China Seas. Australia has since followed suit in rejecting China's territorial claims.

Finally, for the U.S. to lead the free world as it did during the Cold War, thought leaders must rekindle dwindling patriotism. This requires reckoning with America's past and present failings while reaffirming its triumphs and virtues.

■ **Military Competition**

U.S. security depends upon its prosperity, and its prosperity depends upon the global order that the United States undergirds through strength. China seeks to upend this order through regional military preponderance that would allow it to attack its neighbors while denying access to a responding U.S.-backed coalition. To prevent this, America must boost its military power in the Indo-Pacific. In 2020,

U.S. Indo-Pacific Command submitted a \$20 billion request to deter, and if needed, repel any preemptive actions. In a show of bipartisan concern, Democrat and Republican representatives proposed the Indo-Pacific Deterrence Initiative bill. The Senate Armed Services Committee approved it in June 2020, bringing it closer to fruition. The U.S. should also lift restrictions on cooperating with Taiwan and integrate it into its regional defense network.

■ **Leading and Deterring**

The U.S. is slowly awakening to the need to compete with China as it did with the USSR. Yet, even now, powerful voices dismiss warnings of China as a threat. Nonetheless, CCP malfeasance with COVID-19 has cost the world dearly. China's bellicose statements, military aggrandizement, economic warfare, aggressive actions against neighbors, human rights abuses, and promotion of conspiracy theories reveal it to be an adversary. The U.S. must cut reliance on China and lead international competition through all elements of national power. Failure to compete will accelerate the global decline of liberal democracy. In 1989, Francis Fukuyama may have declared victory too early, and for the wrong side.

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Defense Budgeting: Readiness and Research

by **FREDERICO BARTELS, PATTY-JANE GELLER, THOMAS SPOEHR, JOHN VENABLE, and DAKOTA WOOD**

President Donald Trump's Budget Request for defense was released on Feb. 10, 2020, under the tagline of seeking to achieve "irreversible implementation of the National Defense Strategy." This is a great sentiment that reflects the Department of Defense's (DOD) commitment to move toward the great power competition outlined in the National Defense Strategy (NDS) and de-emphasize counterterrorism missions.

There has been substantive support in Washington, D.C. for the shift to great power competition, with its particular emphasis on long-term rivalry with the People's Republic of China (PRC).

In its budget request, DOD largely emphasized readiness in the present and research for future capabilities, in lieu

Each of the services' budget requests and the defense-wide budget request raise issues that should be considered. This article will hit only a very few. Ultimately, the only way the country can reach an irreversible implementation of a policy is if there is broad bipartisan consensus for that policy in Congress. Absent that consensus, the policy will be washed away in the natural political waves in Washington.

■ *Defense-Wide Issues*

The fiscal year (FY) 2021 budget request is marked by trade-offs of contemporary capabilities for research programs and increased investments in readiness. It is a theme that echoes through all the services budget requests. DOD is also trying to do more with re-

adjusted for inflation, from FY 2016 to FY 2020, there was a substantial increase of more than 20 percent in the defense budget, from \$624 billion to \$757 billion.

However, that growth is set to slow in FY 2021. The defense budget is expected to increase by only 0.3 percent from FY 2020 to FY 2021. The increase is determined by the Bipartisan Budget Act of 2019, which set the defense caps at \$740.5 billion; of that, \$69 billion was under the Overseas Contingency Operations (OCO) account.

The cap for FY 2020 was \$738 billion; of that \$71.5 billion was under OCO. The current projections of the Office of Management and Budget show that the White House intends to raise the defense budget by an average of 2.2 percent until 2025, and then freeze it from 2025 to 2030.

Those budget limits fall short of the 3 percent to 5 percent real growth recommended by then-Secretary of Defense James Mattis, and current Secretary Mark Esper, and reinforced by the National Defense Strategy Commission as necessary to implement the strategy. Each has assessed that DOD will need more resources.

It is critical for lawmakers to acknowledge the real budgetary trade-offs required to implement the defense strategy. The "parity" strategy, which marked the decade of the Budget Control Act, of raising defense and non-defense funds is both poor budgeting and dangerous, and it jeopardizes the levels of defense spending that are required over the next several years.

DOD largely emphasized readiness in the present and research for future capabilities, in lieu of increasing contemporary capabilities.

of increasing contemporary capabilities. DOD leadership will have to make a case in Congress why that is the correct path. However, it will be up to Congress to examine whether the choices made by the department are best suited for the United States in the current world of great power competition and sustained counterterrorism operations.

sources by generating savings within the defense-wide accounts; however, base realignment and closures (BRACs) – a major savings generator – are nowhere to be found.

Since the Trump administration took office, there has been a concerted effort to prioritize resources for defense within the discretionary budget. Not

Furthermore, Congress must address non-defense mandatory programs that contribute to the budget's long-run unsustainability.

If ignored, overspending on domestic programs will cause significant challenges for national security in the future.

The increased level of funding is necessary for the military services to better balance their competing priorities – current levels of readiness and modernizing and preparing for deterrence – in the context of great power competition. Every service is going through that challenge, and the increased funding will provide a better margin and context in which to make those decisions.

■ *Re&D Versus Personnel*

In broad terms, there will always be a balance in how to prioritize defense readiness (today), procurement (tomorrow), and research and development (the future). The FY 2021 defense budget request generally favors improving current readiness levels, supporting the current force structure, and investing in research and development over increasing the current numbers of equipment and personnel. By and large, the services outlined a reduction in their procurement of contemporary military assets, such as the F-35, or the anti-submarine

is largely being dedicated to classified programs, accounting for \$1.615 billion of new resources.

Every service's RDTE account is set to grow at some level; the Army, at 1.8 percent, is slated to expand the least; the Navy is receiving a 6.3 percent increase. Military personnel accounts are slated to experience the largest increase, growing by 5.7 percent across DOD.

The Army's military personnel account is the one set to grow the least, by 4.6 percent, while the Navy and the Air

current force structure and investing in future technologies at the expense of expanding contemporary capabilities.

■ *Small Strength Increases*

The president's budget request calls for modest end-strength changes across all the services (with the Navy receiving the largest) and the Space Force, which is asking for its first substantive end strength.

The Space Force is asking to increase from 38 personnel to 6,400 in its active-duty component, accompanied

...there will always be a balance in how to prioritize defense readiness (today), procurement (tomorrow), and research and development (the future).

Force would be increasing by 6.4 percent and 6.3 percent, respectively.

The accounts that are slated to decrease (in order to pay for the above increases) are the procurement accounts. In the whole department, procurement is set to decrease by 4.8 percent.

by a corresponding decline in the Air Force active component, which is decreasing by 6,600. The Marine Corps' active component is also slated to decrease by 600. Meanwhile, the Army is asking to increase by 900 and the Navy by 5,300. The focus of the Navy is on increasing the manning levels to augment its capacity to staff the current ships in the fleet. In the aggregate, DOD wants its active component to increase by 5,500 personnel.

It is modest growth that does not meet the needs that multiple service chiefs have testified as necessary over the years, nor the force construct that would be necessary for two simultaneous major regional contingencies.

Congress ought to investigate and assess the implications of DOD's modest planned growth.

■ *Defense-wide Review Results*

The Department of Defense was able to alleviate some of the budgetary pressure through its defense-wide budget review.

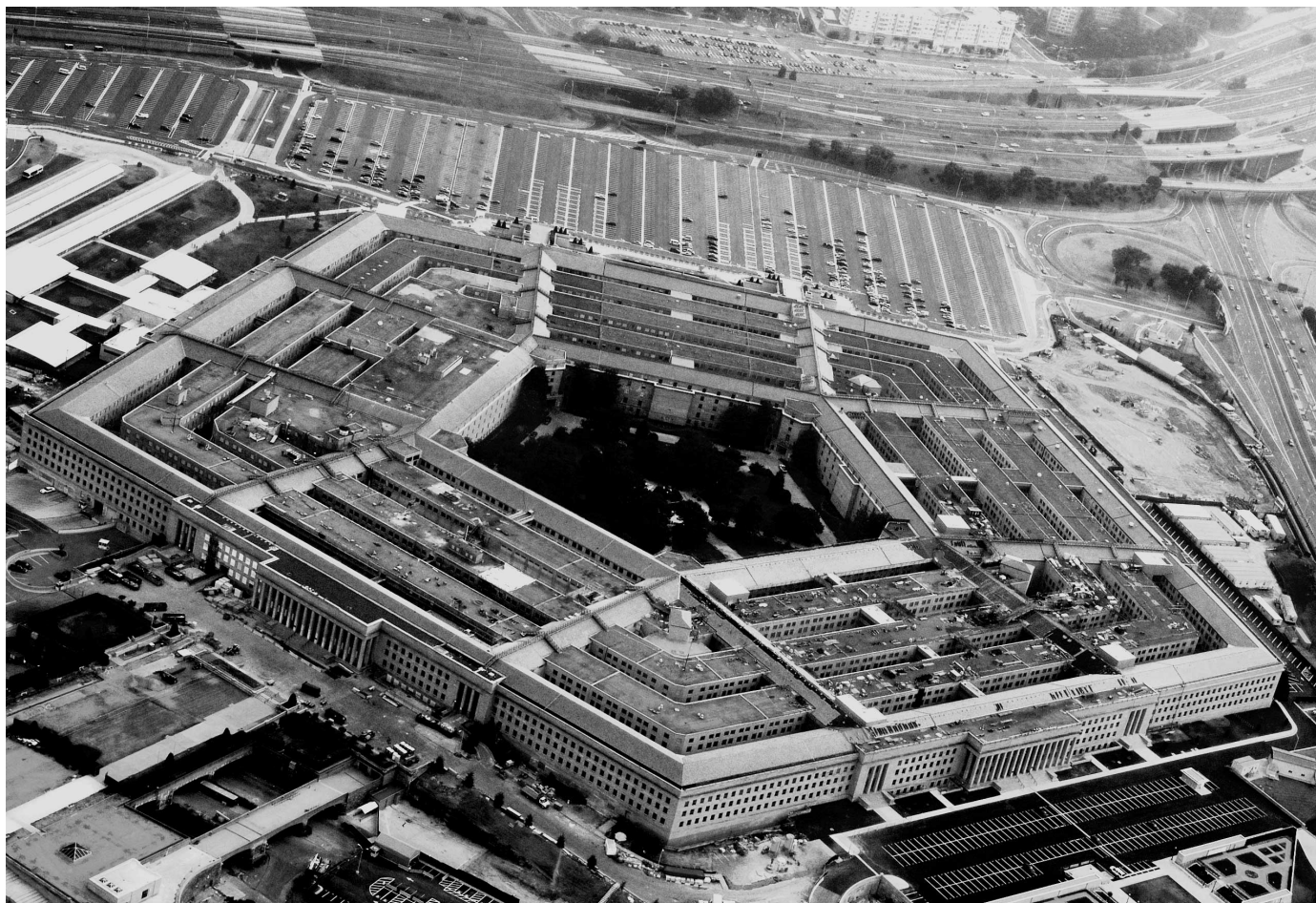
If ignored, overspending on domestic programs will cause significant challenges for national security in the future.

aircraft P-8, to fund research and development projects.

In the department as a whole, the Research and Development, Testing, and Evaluation (RDTE) account is slated to grow by two percent, from \$104.4 billion to \$106.5 billion in FY 2021. The increase

The Navy will experience the largest decline, having its procurement budget reduced by 7.1 percent, while the Army will reduce its procurement by 1.8 percent and the Air Force by two percent.

These choices reflect the bias that this budget request has toward supporting the



The Pentagon, headquarters of the U.S. military.

In the review, based on Secretary Esper's similar efforts in the Army, the Department was able to save more than \$5 billion and reinvest those resources in higher priority areas. The process is planned to continue in all areas of the department, from the military services to the combatant commands and other organizations under the control of the secretary.

A review of this type is laudable, and it should indeed continue. However, the effort is bound to hit a point of diminishing returns, a point the Army has likely already reached.

■ **BRAC: Lost in the Shuffle**

The Department of Defense was supposed to deliver a report assessing the force structure and infrastructure capabilities, outlining the current excess capacity in the department. The most recent study, from October 2017, outlined

19 percent excess capacity in DOD.

The newer report was supposed to re-assess excess capacity and start the process of identifying the locations that have surplus or deficits.

Additionally, the evaluation could serve DOD by helping make its case for new base closures and realignments (BRAC). A new round of BRAC is needed both to generate savings, estimated at \$2 billion annually, and to advance the implementation of the National Defense Strategy.

It is a missed opportunity by the administration that Congress can and should revisit.

■ **The Services**

- **The Army** is focusing on maintaining its current readiness gains and preparing to invest in future capabilities. However, doing so means reducing procurement of contemporary capability

and decreased projected growth in the size of the Army. [Ed. Note: For a deeper look at Army issues, see Steven Metz in this issue.]

- **The Navy's** budget request reflects a service in transition. Its force structure assessment that will determine requirements for the future has been delayed, and the budget request reflects the uncertainty of this transitional period.

In 2019, the Navy began a new assessment of its fleet and the various demands placed upon it to either validate its 2016 force structure assessment (FSA) or to modify it as necessary to account for changes in technology, U.S. national security interests, and advances made by likely competitors during the past four years. As with the other services, the Navy is mindful of the National Defense Strategy and its emphasis on major power competition between the United States, China, and Russia.

The FSA was to have been released in January 2020, but had been delayed “until Spring” due to the Marine Corps’ parallel effort to redesign its forces based on new operational concepts for distributed naval power and the Corps’ contributions to projecting naval power in highly contested environments.

- **The Marine Corps**, like the Navy, has been deeply engaged in a comprehensive review of its forces, capabilities, and geographic posture to ensure it can do its part in meeting the demands of great power competition, as directed in the National Defense Strategy.

The Commandant of the Marine Corps, General David Berger, has pointed the service toward the Indo-Pacific region – with China as the pacing challenge – and made force design his top priority. *[Ed Note: For another look at Marine Corps issues, see Maj. Gen. Jarvis Lynch, USMC (Ret.) and Maj. Gen. Michael Sullivan, USMC (Ret.) in this issue.]*

- **The Air Force** has described a force that needs to increase by more than 20 percent to meet the challenges of great power competition. However, the budget request retires aircraft and reduces the level of procurement of new aircraft. This misalignment must be addressed by Congress.

The Air Force procurement budget, which the Air Force has stated is too small for the missions the nation expects of it fell by \$1.4 billion.

In order to sustain current capacity and stop the aging of its fighter force, the service needs to buy 72 fighters per year. In 2018, the Secretary of the Air Force backed up that statement with a study called “The Air Force We Need,” which found the service needs to grow by 25 percent in order to meet the 2018 National Defense Strategy.

And yet, the service has reduced its procurement budget in each of the two years since that study was released.

- **National Nuclear Security Administration’s** budget includes \$19.8 billion for the National Nuclear Security Administration (NNSA), which is an 18.3 percent increase from last year’s enacted level.

This boost is critical for nuclear modernization because it comes in time for the NNSA to move forward with a number of programs that would revamp the nuclear security enterprise. In particular, the NNSA is planning to resume its ability to produce plutonium pits at both the Los Alamos National Laboratory and the repurposed Savannah River Site, continue the B61-12 life-extension program, develop the W87-1 warhead, and refurbish decaying Cold War-era infrastructure that has been neglected for the past two decades.

■ Recommendations

Congress must play its role in better aligning the budget with the National Defense Strategy. In order to achieve this, Congress should:

- Assess the trade-offs that the DOD has carried in the budget request. The budget request emphasizes the present and the long-term in lieu of developing contemporary capabilities. Congress

preferences and give way to priorities that focus on the threats posed by Russia and the People’s Republic of China.

- Appropriate and authorize the defense budget on time. Continuing resolutions, unfortunately, have been the hallmark of recent budgetary history.

This year, there are already top limits defined for defense that are unlikely to be renegotiated in the current political environment. Congress should use this certainty to accelerate the process and have both authorizations and appropriations acts signed before the start of the new fiscal year.

■ Conclusion

The fiscal year 2021 defense budget requires decisions and priorities that will determine how the country will implement the National Defense Strategy and adapt to the challenges of great power competition. The president’s budget request outlined the department’s trade-

National Defense Strategy ... will require Congress to move away from some of its parochial preferences and give way to priorities that focus on the threats posed by Russia and the People’s Republic of China.

needs to understand why the services made those choices as well as the risks that these choices bring. The department has not done a good job defining risk – and Congress needs to continue pressing on that question. After all, if there is no precise definition of the downsides of each choice, it is not possible to make an informed decision.

- Evaluate how great power competition is reflected in the defense budget. The changes required by the National Defense Strategy are not trivial and should have lasting impact on the shape of our forces. It will require Congress to move away from some of its parochial

offs for the coming fiscal year. However, it will be up to Congress to decide on these trade-offs and determine if the proposed investment and divestments are the adequate path forward.

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Lessons from the Collapse of U.S. Rare Earths Production

by **JEFFREY A. GREEN**

[Ed. Note – an update: The Pentagon has proposed legislation that aims to end reliance on China for rare earth minerals by enabling the government to spend up to \$1.75 billion on rare earth elements in munitions and missiles and \$350 million for microelectronics; it would eliminate caps in relation to hypersonic weapons. Author Jeffrey Green said, “To me, this is the biggest thing that has happened to rare earths in a decade. These processes can be expensive, and the process for separating rare earth oxides can cost hundreds of millions of dollars, but the policy shift is the government realizing they have to put serious bucks into this.”]

Out in the Mojave Desert in California lies the Mountain Pass mine, once the world’s foremost supplier of valuable rare earth minerals – 17 elements deemed critical to modern society. In an age when China controls 80 percent of the global output of these minerals, it is strange to believe that a once-dominant source sits within the United States. Stranger still is the tale of how this mine came to supply the Chinese rare earths industry.

Mountain Pass opened in 1952. First explored as a uranium deposit, it soon supplied rare earths for the electronic needs of the Cold War economy. Until the 1990s, it stood alone as the only major source of rare earths worldwide.

By 2002, however, the mine was defunct. In the eyes of the U.S. government and major manufacturers, it no longer made sense to acquire rare earths from a U.S. source subject to stringent environmental regulations. Instead, the hard business of extracting useful minerals was exported to other countries, where

environmental damage was safely out of sight. China happily obliged, allowing environmental harm to proliferate so long as the costs of rare earth mining were kept down.

In 2008, a group of investors formed Molycorp and convinced Wall Street to resurrect Mountain Pass under an audacious plan dubbed “Project Phoenix.” With the promise of wealth to be generated from new (but untested) technolo-

earth exports to Japan over a diplomatic dispute in 2010, leading prices to spike. Molycorp’s stock would later soar. The cash-rich company announced several acquisitions – processing plants in Arizona and Estonia as well as a Canadian rare earth technology group named Neo Materials that had extensive operations in China.

But in actuality, Molycorp was struggling to stay solvent. Those new in-

...the hard business of extracting useful minerals was exported to other countries, where environmental damage was safely out of sight. China happily obliged...

gies, Molycorp bullishly claimed that it could compete with (or even underprice) China’s near-monopoly. Molycorp’s critics weren’t convinced, pointing to the immaturity of the company’s mineral separation technology, the high barriers to entry and the lingering threat of the Chinese monopoly to manipulate prices at will.

Despite these reservations, Wall Street and the Pentagon supported the project. For the Pentagon, and for an administration often indifferent to mining interests, it was a dream come true: Private investors would deliver a secure supply chain without the U.S. government’s help.

At first the situation looked promising. Chinese companies restricted rare

novative technologies? They didn’t generate significant revenue or work as designed. By 2013, the company’s revenues were in free fall. The president and CEO stepped down amid an investigation by the U.S. Securities and Exchange Commission into the accuracy of the company’s public disclosures (though he was never charged with any wrongdoing).

As the company’s fortunes dwindled, its new CEO oversaw the transfer of many of Molycorp’s most profitable assets to Chinese-linked Neo Materials, where he formerly served as CEO. Molycorp’s final remaining husk declared bankruptcy in 2014. Unsurprisingly, the majority of Neo Materials’ revenue-producing operations are now in China. To make matters worse, the Mountain



A truck transports rare earth elements for export in Lianyun gang, China.

Pass mine was purchased out of bankruptcy by a consortium that included a Chinese-owned firm.

By 2017, it was obvious that in the showdown between Molycorp and China, the Chinese had won. Mountain Pass was now sending U.S.-mined rare earth concentrate to China for processing. The dream of a one-stop American rare earths solution was over, and the private sector had little appetite for reviving it.

The history of Molycorp is littered with “what ifs.” What if the Pentagon’s mid-2010s industrial policy determined that rare earths were critical to national security, as it does now? And, most importantly, what if American customers, including those in the U.S. government, had decided that diversifying their rare earth supplies with an American source had been worthwhile?

Recently there have been stirrings of interest in repatriating rare earth production to the United States. The U.S. military has become acutely aware of its dependence on China, due in part to

belligerent Chinese threats to cut rare earth exports. American companies, too, are realizing how dependent they are on this single supplier, a country that is becoming more expensive to work with as trade tensions rise. However, those in the private sector know all too well how difficult it is for companies to initiate supply chain improvement. Therefore, it is the government’s responsibility to set the stage for increased American rare earth production.

There are a number of steps the U.S. government can take to establish a more certain future for domestic rare earth production. Reducing red tape and bureaucratic inertia will lower costs and reduce risk – there is no reason that permitting a mine in the United States should take five times longer than it does in Canada or Australia.

The government can also protect the market, at little cost, from Chinese manipulation by agreeing to purchase rare earths from American producers when such materials are intended for

military systems. Instead of funding substitution technologies to reduce demand for rare earths, the U.S. should invest in production technologies to increase their supply.

The Department of Defense has taken note, having recently solicited industry for options on rare earth separation capability, which could result in direct investment. These fixes, properly executed, represent the best chance the U.S. has at revitalizing a crippled industry essential to our national security.

Now, political leaders must act so that industry can follow. If the story of our nation is of any indication, American innovation will rise to the occasion and deliver us solutions for our rare earth needs.

JEFFREY GREEN is president of J.A. Green & Company. He founded and currently serves on the Strategic Materials Advisory Council, and previously served as staff director to the House Armed Services Subcommittee on Readiness.

COVID-19: China's Lies and Lessons for the Pentagon

by **STEPHEN BRYEN** and **SHOSHANA BRYEN**

The idea of biological warfare has been with us over the centuries. You can start with bits of Thucydides' vividly ugly description of the Plague of Athens in 430 BCE:

Strong fevers in the head and a burning redness in the eyes of those who had previously been healthy, and for no apparent reason... breathing took on a foul and unpleasant smell... pain descended to the chest...settled into stomach and caused it to release secretions of bile...tiny blisters and ulcers...unquenchable thirst...progressed to the intestines...attacked the genitals...

Mycotoxins, biological agents that can occur in nature from rotting or spoiled food or grain, would produce that sort of horrible death. Thucydides briefly considered the possibility that the enemies of Athens mixed toxin-laden grain in shipments to the city.

Over centuries, armies have thrown dead infected animals over castle walls. Japan dropped bio-bombs in World War II, and Saddam planned to do it to Israel. "Yellow Rain" was spread in Cambodia, Laos and Afghanistan by plane, artillery shell, booby-traps, and handheld weapons. Anthrax was sent through the mail.

■ **The Bad Guys**

The U.N.-backed Biological Weapons Convention, entered into force in 1975, currently has 109 signatories. This convention, as cited by the Arms Control Association, bans the development, stockpiling, acquisition, retention, and production of biological agents and toxins

"of types and in quantities that have no justification for prophylactic, protective, or other peaceful purposes," as well as weapons, equipment, and delivery vehicles "designed to use such agents or toxins for hostile purposes or in armed conflict," and "the transfer of or assistance with acquiring the agents, toxins, weapons, equipment, and delivery vehicles."

Unfortunately, the convention has no inspection or enforcement mechanisms, according to the Nuclear Threat Initiative that tracks weapons of mass destruction. It is widely believed that many states are conducting bio-weapons research and development in secret, including Russia, China, Iran, and North Korea. Russia is a treaty signatory but even after Moscow ratified the treaty the Federation of American Scientists reported that Russia supported through an organization called Biopreparat 18 research centers working on pathogenic bio-weapons.

On Sept. 16, 2019 in Novosibirsk,

engaged in bio-defense research, all of the facilities can be used in bio-warfare.

Iraq under Saddam created both anthrax and smallpox among other bio-agents. U.N. inspection reports produced between October 1995 and October 1997 noted that Iraq started researching anthrax warfare in 1985, at its Muthana chemical weapons center, and large-scale fermenters were used to produce anthrax spores in bulk at a pilot plant, Al Salman, after field trials on monkeys and sheep.

In its 1999 final report to the U.N. Security Council, United Nations Special Commission for Iraqi compliance (UNSCOM) called Iraq's biological warfare program "among the most secretive of its programs of weapons of mass destruction." It said that Iraq "took active steps" to conceal the program, including "inadequate disclosures, unilateral destruction, and concealment activities."

According to Paul Rogers, professor of peace studies at Bradford University

Neither the U.S. Navy nor the Pentagon were prepared for a pandemic and their decisions resulted in the withdrawal of the aircraft carrier USS Theodore Roosevelt from the region.

Russia, a gas canister exploded at a reinforced concrete laboratory called the State Research Center of Virology and Biotechnology. The lab, formerly the Vector Facility, is an old Soviet bio-weapons lab that now allegedly researches (and houses) Ebola, smallpox, and anthrax. Although Russia claims this facility is

in the United Kingdom, drawing on UNSCOM's reports, Iraq possessed an estimated 50 anthrax-filled bombs ready for use at the time of the First Gulf War. Saddam also had prepared 10 missiles dispersed to separate locations, loaded with anthrax warheads. "The assessment was that the Iraqis were likely to use weapons

of mass destruction if the survival of the regime was threatened.” Aircraft were readied with special tanks that could be filled with liquid anthrax and other biological agents during the Second Gulf War. The United States destroyed these aircraft in bombing raids.

Iran got significant help from both China and Russia for its chemical and biological weapons programs, although Iran also is a signatory to the Biological Warfare Convention. As reported by Alan Goldsmith, a former congressional staff expert, “Iranian military controlled facilities, Imam Hossein University (IHU) and Malek Ashtar University (MAU), have researched incapacitating chemical agents.” Published Iranian articles (for example by Peter Books at the Heritage Foundation) have cited weaponizing applications of pharmaceutical-based agents (PBAs), including the powerful opioid fentanyl. The report added that “IHU’s chemistry department had sought kilograms of medetomidine – an incapacitating sedative it has researched – from Chinese sellers.”

COVID-19 has been a bonanza for states and terrorists who now know a lot more about critical vulnerabilities of big powers including the United States...

North Korea has an aggressive biological and chemical warfare program, according to the Middlebury Institute of International Studies at Monterey, and is reported to have worked on plague, anthrax, viral hemorrhagic fevers, and smallpox among other bio-war agents, and has recruited foreign technicians to help it advance its program. Andrew C. Weber, a Pentagon official in charge of nuclear proliferation, said that North Korea is far more likely to use biological weapons than nuclear weapons. “The program is advanced, underestimated and highly lethal,” he told *The New York Times*.

China probably has the most advanced bio-warfare program in the world. As noted by the US-China Economic and Security Commission in its 2006 Report to Congress, two facilities in China have links to China’s offensive biological weapons program: the Chinese Ministry of Defense’s Academy of Military Medical Sciences (AMMS) Institute of Microbiology and Epidemiology (IME) in Beijing, and the Lanzhou Institute of Biological Products (LIBP).

In addition to these two central laboratories, it is estimated that there are at least 50 other laboratories and hospitals being used as biological weapons research facilities. The head of the AMMS has now been put in charge of the Wuhan Virology Laboratory. Chen Wei, a major general of the People’s Liberation Army, was flown into Wuhan by the central government before officially taking the helm of Wuhan Institute of Virology. She was given responsibility to clean up the mess in Wuhan during the COVID-19 pandemic and specifically at the laboratory.

China is also advanced in what is called CRISPR-Cas9 technology which the Index Project says is “a unique technology that enables geneticist and medical researchers to edit parts of the genome by removing, adding, or altering sections of DNA sequence.” American officials now see CRISPR gene editing as a serious threat to national security. As National Defense Magazine reports, it can lead to precisely targeted bio-weapons that might attack a single racial or ethnic group or could be used in combination with vaccines to carry out a bio-warfare operation while protecting its own forces.

China is collaborating with many of the world’s leading virologists and geneticists under the cover of peaceful research on viruses and vaccines, no doubt feeding its bio war program.

There is no consensus on the origins of the COVID-19 pandemic. The Chinese government insists the virus originated in part from horseshoe bats and became zoonotic, that is, it jumped from bats to humans with some intermediate stop. There is also suspicion that laboratories in Wuhan, and perhaps elsewhere, that were engaged in advanced coronavirus research, were the source. And there exists the possibility of actual biological weapons research.

■ What We Know

Some things are clear about the coronavirus pandemic.

The outbreak was hidden by the Chinese government for months and information from doctors and nurses was suppressed. In some cases, experts simply disappeared. In one of the most important early cases, Li Wenliang, a doctor who was severely reprimanded for criticizing the government, was pronounced dead from coronavirus even before he actually died. In other cases, false or misleading information was aired, including by the World Health Organization (WHO) at the behest of the Chinese government.

To complicate matters further, in November 2018, a scientist from Wuhan was detained in Detroit with what the Weapons of Mass Destruction Directorate of the FBI later reported “may be viable Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS) materials.” A related investigation was carried out late last year in Canada involving a Winnipeg Bio-Level 4 lab, does research with the deadliest pathogens, and a researcher who made multiple visits to Wuhan doing “third party funded” work in Chinese labs. Canadian authorities deny any link to COVID-19.

But while there is no consensus

on the origins of COVID-19, there is no doubt that it has been a bonanza for states and terrorists who now know a lot more about critical vulnerabilities of big powers including the United States and NATO, as well as Russia and China. These vulnerabilities include:

- The spread of biological toxins, including viruses, can be extremely broad, even global.
- Manufacturing and distribution systems can be significantly harmed.
- First responder and hospital systems lack surge capacity and can be overwhelmed by a sudden pandemic.
- There can be shortages or lack of surge capacity of medical supplies during pandemics, including simple facial masks and hand disinfectants as well as critical equipment such as ventilators and pharmacological supplies.
- Military operations can be delayed, re-purposed, or simply halted. China, for example, has increased military operations in the South China Sea.
- Economic activity can be severely reduced and markets in capitalist countries can be stressed and lose value at depression levels. As the Brookings Institution noted, the United States saw one of the sharpest economic contractions in its history in March, continuing through the second quarter of 2020.
- Producing vaccines and effective treatments is time consuming and uncertain, with most projections assuming a year before vaccines are widely available. Moncef Slaoui, a former pharmaceutical executive the White House, chosen to lead a crash development program, acknowledged that the 12-18 month timeline cited by Dr. Anthony Fauci of the Centers for Disease Control and Prevention, was already “very aggressive.”
- Response measures can, over weeks, “flatten the curve” of infection to avoid overwhelming medical facilities but may not stop the spread of novel pathogens.
- An irresponsible press and media can spread unrest and panic, undermining trust in a government’s ability to cope with a bio-war crisis.

• Hostile states can use deception to hide responsibility while at the same time seeking significant political, economic and military advantages in the midst of a crisis.

■ *Strategies for the Future*

While many experts focused on the coronavirus lockdowns and their liftings, less attention has been given to the degradation of the U.S. military and weakening of America’s strategic deterrence, especially in East Asia. Moreover, concomitant with a loss of deterrence is a rise in the risk of general war. There are two keys to preparing for a future biological disaster: a strategy that keeps the military and critical industries operating, and providing far better intelligence on “bad” actors, especially Russia and China. Both the strategy and intelligence need massive improvement.

During the Gulf War and Iraq War, Israel set an important civil defense example by providing kits to all its citizens that included gas masks and antibiotics...

Neither the U.S. Navy nor the Pentagon were prepared for a pandemic and their decisions resulted in the withdrawal of the aircraft carrier *USS Theodore Roosevelt* from the region. In early March 2020, the Navy persisted in “normal” port calls to areas with rising coronavirus infection rates – the *Roosevelt* went to Vietnam and the crew was on the ground for five days. Ships were then “quarantined” at sea for 14 days. The Navy had to know by then that the quarantine of cruise ship passengers and crew together at sea meant the virus would spread widely among those on board. At the same time, while the Pentagon cancelled all travel, military exercises, and deployments, it did not countermand the Navy decision to “quarantine” 5,000 people together.

China took advantage of the absence of the *Roosevelt* by stepping up operations in the South China Sea and there is a risk that Chinese military leaders may push for action against more significant targets, including Taiwan.

The Pentagon and military services must find a better way to secure effective fighting forces under pandemic conditions. Part of the answer would seem to be in prepositioning testing kits, protective masks, and decontamination equipment in safe zones located on or near important U.S. military bases. Clearly the Pentagon has been scrambling for answers, including having many of its personnel telework (although DOD has come nowhere near solving the security issues). The situation for troops, including sailors, abroad should be a top priority.

A similar strategy is needed for critical industries. If specialized plants reduce

output, or cease working altogether, the damage to our capabilities could be enormous. A civil strategy to keep businesses, including small businesses, operating could significantly reduce the need for lockdown or quarantine measures.

During the 1991 Gulf War and 2003 Iraq War, Israel set an important civil defense example by providing kits to all its citizens that included gas masks and antibiotics to be used in case of a biological attack. The distribution of kits ended in 2014, but Israel stands as an excellent example of what the United States and other nations could do to protect against pandemics caused by viruses. A properly designed kit for every citizen (Israel had baby kits and kits adjusting for men with long beards) would go a long way to protect lives and

keep the country working, meaning that lockdowns and other measures could be confined to hot spot locations and only when absolutely needed.

Kits might include high quality face masks, synthetic rubber gloves, and most importantly, general purpose antiviral compounds. The last is not yet available but their development would help reduce fear in the public, stop hoarding practices that harm social trust, and keep transportation systems operating. It also would reduce pressure on doctors, nurses, and hospitals.

Another critical need is vastly improved intelligence, so that dangers can be avoided or mitigated. A great deal is known about China's biological research operations because of extensive contacts and cooperation between Chinese and foreign scientists, and projects shared between Chinese, American, French, Australian and other laboratories. For a brief three years (2014-17) the U.S. Government recognized the risk in certain types of viral research and urged Chinese, U.S. and other scientists to stop doing it, going so far as to halt funding from the National Institute of Health (NIH) and other organizations. As the journal *Science* reported, this included "all federal funding for so-called gain-of-function (GOF) studies that alter a pathogen to make it more transmissible or deadly so that experts can work out a U.S. government-wide policy for weighing the risks." Federal officials are also asking the handful of researchers doing ongoing work in this area to agree to a voluntary moratorium."

But in 2017, the ban was dropped. No system was worked out as promised in 2014. While no public explanation has been given, it seems that the NIH felt the ban was impeding work on virus vaccines.

After 2017, the U.S. scientific establishment returned to business as usual, cooperating with China on biological research with no strategic assessment of the risks involved, although there were warnings. The FBI was concerned about biological agents, including SARs

viruses, being moved in and out of the United States, and U.S. Customs seized some of this material. Likewise, the CIA evidenced serious concern about certain biological warfare dangers, particularly from terrorists. U.S. intelligence may have offered guesses as to biological weapons-related research by China, but likely had no hard evidence about this program.

■ Specific Steps

The United States needs a broad range of specific changes and/or improvements in the management of proactive bio-warfare responses and maintenance of the U.S. deterrent abroad. These should include:

1. Suspend U.S.-sponsored biological research with China for Class A Bioterrorism Agents, which are defined as "organisms that pose a risk to national security." Such agents can easily be disseminated or transmitted from person to person; can result in high mortality rates; have the potential for major public health impact; might cause public panic and social disruption; and could require special action for public health preparedness.

2. Expand the CDC Class A Bioterrorism Agents and Diseases list to include all coronavirus types without exception including coronavirus variants, mutations, and experimentation in zoonotic transfer of virus agents, variations and mutations.

3. Strongly urge American scientists not to cooperate in any Class A Bioterrorism Agent research with Chinese counterparts by withholding U.S. government funding.

4. Cancel visas to Chinese researchers who are in the United States or coming to America to work on Class A Bioterrorism Agents.

5. Require compensation from China for the coronavirus epidemic and use the International Court of Justice to bring a case against China.

6. Ask the WHO or an independent inspection of China's virology laboratories.

7. Demand that Taiwan be included in WHO, at least as an observer, as

a condition of any future U.S. funding of the organization. As an alternative, Washington should consider a "democracies group" of international health organization that includes Taiwan.

8. Strengthen U.S. defenses in the Pacific including on Guam, Japan, and Okinawa. Instead of withdrawing U.S. bomber forces from Guam, the White House should bolster the force there and add air defenses to protect both the airfields and the harbor used by the U.S. Navy.

9. Consider basing sophisticated air defense systems on Taiwan (perhaps using Israel's Arrow III system, which is available now) run by the United States and partnered with Taiwan.

10. Demand that Japan move quickly to strengthen its air defense systems, especially around ports and harbors and to restore the recently cancelled missile defense sites in Akita Prefecture, planned to host two AEGIS Ashore missile defense bases capable of operating Standard Missile 3 Block IIA interceptor missiles as well as Standard Missile 6 interceptors.

■ Conclusion

As the world emerges from pandemic, major flaws in the "Chinese model" have appeared: numerous countries have junked defective coronavirus test kits from China, while others have recalled tens of thousands of defective Chinese-origin N-95 face masks. Countries in China's Belt and Road Initiative are complaining about the heavy economic burden of mandatory Chinese "loans." If China is not reaping the benefits it sought to claim during the early confusion of the West, an opportunity for the United States to reassert leadership may appear. The country must be ready to step up.

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Why Japan Must Reconsider Its Aegis Deployments

by **DANIEL GOURÉ**

The security environment in the Western Pacific is becoming more challenging for the U.S., its friends, and allies. China seeks to dominate the region and project power globally. North Korea is expanding its arsenal of ballistic missiles and nuclear warheads. To successfully deter Beijing and Pyongyang, and counter their ability to use military coercion, the U.S. is improving its defense posture in the region both qualitatively and quantitatively. U.S. allies in the region, chief among them Japan, need to do the same. But will Japan make the appropriate investments?

The balance of powers in the Western Pacific is changing rapidly. China is seeking to build a “great power” military that could outmatch that of the U.S. It is investing in a wide range of high-tech capabilities. Many of these are designed explicitly to counter areas of U.S. advantage or exploit clear vulnerabilities. In a recent report to Congress, the U.S.-China Economic and Security Review Commission identified a number of specific capabilities the Peoples Liberation Army (PLA) is developing for the purposes of targeting U.S. military forces and countering its advanced capabilities.

The weapons and systems under development and those that are being fielded by China’s military—such as intermediate-range ballistic missiles, bombers with long-range precision strike capabilities, and guided missile nuclear attack submarines—are intended to provide China the capability to strike targets further from shore, such as Guam, and potentially complicate U.S. responses to crises involving China in the Indo-Pacific.

China’s increasingly accurate and

advanced missile forces are intended to erode the ability of the United States to operate freely in the region in the event of a conflict and be capable of holding U.S. forces in the region at risk.

China’s continued focus on developing counter space capabilities indicates Beijing seeks to hold U.S. intelligence, surveillance, and reconnaissance satellites at risk in the event of conflict.

In particular, the PLA is rapidly expanding its capabilities to conduct massed, long-range strikes against both fixed facilities and mobile forces. The PLA Air Force is now operating its own version of a fifth-generation stealth fighter and will soon introduce a new long-range strategic bomber. The PLA has deployed a large number of long-range precision-guided ballistic and cruise missiles, one of which, the DF-21, is believed to be specifically designed to attack large surface warships such as U.S. aircraft carriers. Conventionally-armed missiles will be employed in massed attacks, intended to cripple opposing forces at the outset of hostilities. The PLA Navy

overall goal is to distribute units more widely throughout the region, make each formation and platform more lethal and agile, and enable joint force commanders to employ capabilities across all the warfare domains. The Marine Corps’ concept for Expeditionary Advanced Base Operations, which focuses on smaller, agile formations that are constantly moving in proximity to hostile forces while conducting long-range fires, exemplifies the change in how the U.S. plans to conduct future high-end warfare.

The U.S. military is investing in new and expanded capabilities to support these forces. One of the most important areas for modernization is in long-range, precision strike systems such as the Long-Range Air-to-Surface Missile, the Tomahawk cruise missile Block V, and the Army’s Precision Strike Missile. Another area is missile defense, using land-based systems such as Aegis Ashore and the Terminal High Altitude Area Defense System, and the sea-based Aegis Ballistic Missile Defense System with the new SPY-6 radar.

Japan plays a unique role in the security of the Indo-Pacific region due to its location, economic power and close ties to the United States.

is rapidly expanding with new attack submarines, aircraft carriers, missile destroyers and large amphibious warfare ships.

In response, the U.S. military is making significant changes to its force posture and concepts of operation. The

U.S. allies share Washington’s view on the growing security threat posed by China. In response, they are increasing defense expenditures and spending more on modernization. A major initiative in this is the acquisition of the F-35 Joint Strike Fighter



An Aegis SM-3 Block 1B interceptor launched from the USS Lake Erie during a interception test off the coast of Kauai, Hawaii. (Photo: U.S. Missile Defense Agency)

by Japan, Australia, and South Korea.

It is impossible to overestimate the importance of Japan as a U.S. ally. Japan plays a unique role in the security of the Indo-Pacific region due to its location, economic power, and close ties to the United States. The U.S. bases Air Force, Navy and Marine Corps forces in Japan precisely because of its unique geographic position. Thus, it is highly likely, really a virtual certainty, that Japan will be involved in any conflict between the United States and China.

The government of outgoing Prime Minister Shinzo Abe made deterrence of the Chinese and North Korean threats its number one security priority. To that

end, it is pursuing a national security strategy that focuses on improving the Japanese Self Defense Forces (JSDF) both qualitatively and quantitatively. The JSDF also has begun creating cyber security units as well as developing the capability to conduct multi-domain operations as the U.S. plans to do.

In recent years, Tokyo has undertaken a significant program of military modernization designed not only to improve its ability to defend the homeland and surrounding waters, but also to project military power to more distant regions. In addition to committing to purchase some 147 F-35s, Japan has acquired or plans to buy V-22 tilt-rotor transport aircraft, P-8

anti-submarine warfare planes, KC-46A aerial refueling tankers, AH-64 Apache gunships, E-2D Advanced Hawkeye airborne early warning aircraft, and Patriot air defense systems from the U.S. Most of the country's fleet of F-15Js will be upgraded with new electronics and the ability to carry advanced weapons.

In addition, Japan is investing in indigenously-produced capabilities, intended to expand the reach and flexibility of its military forces. The JSDF has modified two Izumi class destroyers into mini-aircraft carriers capable of handling the short-takeoff/vertical landing F-35B. The country has begun an R&D program for a sixth-generation fighter to replace its aging F-1s. Tokyo participated in the successful co-development program with the United States for an advanced variant of the Standard Missile 3 (SM-3), designated the Block IIA, for the anti-ballistic missile mission. Both countries are now deploying this new missile killer. Japan also will collaborate with the United States on developing and deploying an array of small, low-orbiting missile warning satellites.

The end of the Abe era is a time to consider Japan's future role in the security architecture of the Indo-Pacific region. Frankly, Japan needs to do more if it is to have any hope of deterring China and North Korea. It must build on the efforts of the past decade. In essence, Japan needs to be able to deflect and degrade any initial Chinese or North Korean attack, providing time for the U.S. and other allies to respond militarily. With the proper additional investments in offensive and defensive capabilities, it could be an "unsinkable aircraft carrier," the role played by many Pacific island bases and even Great Britain during much of WWII.

This means, in part, investing seriously in active and passive defenses to counter the air and missile threats from China and North Korea. Some observers have gone even farther, proposing Japan adopt a strategy of "active denial" designed to make Japan less vulnerable to attack by expanding both its defensive capabilities and simultaneously

increasing its capability to attrit hostile offensive forces even at long distances from the Home Islands.

One area that has become problematic is missile defense of the homeland. In the event of a conflict with China, most experts believe that the PLA will attempt to employ its vast arsenal of conventionally-armed ballistic and cruise missiles to destroy both U.S. and JSDF targets in Japan. It is critical that Tokyo takes steps to counter this threat thereby and make clear to Beijing that it cannot count on achieving a swift, disarming strike at the outset of hostilities.

Japan had begun a program that would have provided it with the basis for a credible defense against the growing Chinese missile threat. It invested in the Patriot terminal air defense system and acquired eight destroyers equipped with the Aegis Ballistic Missile Defense System including advanced variants of the Standard Missile.

In addition, several years ago, the Abe government decided to acquire two Aegis Ashore missile defense systems. This is the same system currently deployed in Europe. One reason Japan decided to acquire the Aegis Ashore was to reduce the burden on its destroyer fleet associated with serving as that country's primary missile defense capability. A missile defense based entirely on sea-based capabilities is not always optimally located to protect land areas. In addition, destroyers assigned the missile defense mission for the Japanese homeland are generally restricted to a small ocean area, close to land. As a result, ships on missile defense patrols are unavailable for other critical missions.

However, a few months ago, the Japanese Ministry of Defense announced it was halting the procurement. According to the Defense Minister, Taro Kono, the suspension decision was based on both technical and cost issues with the program. The principal technical concern is the danger that from the currently planned sites, the SM-3 Block IIA booster might fall into populated areas. Modifications will be required to the missile's

software and, possibly, hardware to solve this problem. There was also local opposition to the placement of the AN/SPY radar near populated areas. There are reports that the Japanese government

In light of the growing missile threats posed by China and North Korea, Japan needs to field a multi-layer missile defense.

had decided to halt the planned deployment at the site in Akita prefecture in the northwest of Honshu, Japan's main island and to explore alternative locations.

With respect to cost, it is true that the price for completing each of the two sites had increased by some 25 percent to around \$900 million. However, it should be pointed out that the cost of a single Japanese missile defense-capable destroyer is now approximately \$1.5 billion, exclusive of expendables such as the SM-3 Block II missiles. Moreover, the manpower needed to operate additional Aegis-capable destroyers far exceeds that for an equivalent land-based missile defense system. For defense of the Japanese homeland, a shore-based system is the cost-effective solution.

Japan is now searching for an alternative approach to defending itself against the PLA's missile threat. Consideration is being given to adding a couple of additional Aegis-capable destroyers and even massive, offshore missile defense platforms.

The Japanese government needs to rethink its decision to halt work on the Aegis Ashore program. In light of the growing missile threats posed by China and North Korea, Japan needs to field a multi-layer missile defense. Such a defense is essential to maintaining a credible deterrent. In addition, in the case of North Korea, it is a hedge against a potential accidental or unauthorized

launch. The chief of staff of the Japanese Maritime Self Defense Forces publicly challenged the decision to cancel Aegis Ashore, arguing that only a land-based system can provide year-round, continu-

ous, all-weather missile defense. Eight or even 10 Aegis-capable destroyers are simply not sufficient to manage the threat. The most sensible, and cost-effective solution is to move forward with Aegis Ashore deployments, modified as necessary to meet credible concerns.

But an improved defensive posture may not be sufficient to deter China. A credible deterrent requires that Japan be able to strike critical PLA military targets, including those that might be aimed at Japan. During World War II, Great Britain relied on Bomber Command to be the offensive complement to its home defense capabilities. Japanese sources have raised the possibility of developing "enemy base attack" capabilities as part of its deterrent strategy. In the event of a conflict with China or even North Korea, those countries' military facilities, ISR capabilities, command centers and forces cannot be granted immunity from attack.

The United States military is looking at new strategies, forces, and equipment with which to counter the Chinese military's growing power in the Western Pacific. Japan must be part of the solution. But in order to play the role of an unsinkable aircraft carrier, Japan must invest more in advanced offensive and defensive capabilities.

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Reenergizing Washington's Strategic Perspective

An *inFOCUS* interview with Senator TOM COTTON

Senator Tom Cotton (R-AR) was elected to the United States Senate in 2015 at the age of 37, having previously served one term in the House of Representatives. In 2005, Cotton was commissioned in the United States Army. An infantry officer, he rose to the rank of captain. He served in Afghanistan and Iraq, where he was awarded the Bronze Star and Combat Infantryman Badge, and he remained in the Army Reserve until 2013. He is a member of the Senate Armed Services Committee; the Committee on Banking, Housing and Urban Affairs; the Special Committee on Aging; and the Select Committee on Intelligence; and the Joint Economic Committee. JPC Senior Director Shoshana Bryen spoke with Sen. Cotton in late August.

***inFOCUS:* AMERICAN DEFENSE RESTS ON THE ASSUMPTION OF A SUPPORTIVE CONSENSUS ABOUT OUR NATIONAL INTERESTS. DO WE HAVE CONSENSUS TODAY ON THE KEY ISSUES OF DEFENSE?**

Senator Tom Cotton: There remains bipartisan support, maybe to a lesser degree in Washington with the Democrats today, but across the country that America needs to play an active role in the world. We need to be assertive in defense of our interests, our allies, and freedom where we can across the globe. We took a wrong turn in the Obama era, in that we refused to take decisive action against our main rivals. We let China's aggression go largely unchallenged. We tried to reset relations with a Russia that had no desire to change its behavior. And of course, we basically handed over so much influence in the Middle East to Iran.

That's on top of the very deep budget cuts that the Obama administration made to the military, constraining our ability to operate in multiple theaters at one time. The good news is that has been largely reversed under the Trump administration, starting with the budget, but also ending the retreat from the world, the willingness to use military force in a targeted, calibrated way,

such as the strike against Qasem Soleimani or the strikes in Syria, and the willingness to stand up for and assert the interests and the aspirations of the American people, for ourselves, and for our allies.

***iF:* WILL U.S.-LED "SNAPBACK" SANCTIONS ON IRAN HAVE AN IMPACT WITHOUT A UN SECURITY COUNCIL VOTE?**

Sen. Cotton: I certainly hope that once snapback sanctions are applied, the rest of the Security Council and the rest of the world will respect the conventional arms ban on Iran. I find it hard to believe that Great Britain and France are going to weaken, and perhaps vitiate, their ability in the future to veto resolutions at the Security Council by pulling some lawyerly, procedural tricks to pretend that we can't invoke snapback sanctions.

Assuming we do, the question becomes do other nations respect those sanctions? Do Russia and China in particular respect the conventional arms ban? If they don't, the United Nations has to show that it's willing to act against those countries and enforce its own resolutions. And the United States has to lead in that effort as well. We cannot have a world in which the United

Nations has imposed a conventional arms ban on Iran but China is selling it advanced drones and Russia is selling it advanced air defense systems.

***iF:* HOW CAN THE U.S. WORK BETTER WITH OUR ALLIES? JAPAN, SOUTH KOREA, AUSTRALIA, NEW ZEALAND, AND EVEN VIETNAM ARE VERY CONCERNED ABOUT CHINA. CAN TAIWAN BE A PIECE OF THAT?**

Sen. Cotton: The Trump administration has taken great strides to unite a coalition of countries throughout East and South Asia to defend our common interest against China becoming a hegemon that calls the shots in Asia and around the world, as China hopes to do. These countries are of very different traditions, cultures and political systems, from Korea and Japan, Taiwan, the Philippines, Vietnam, India – and very few would want to be a vassal state to China. Of course, they are all relatively small compared to China, from an economic, demographic, geographic standpoint, so they need a strong partner in the United States to support that coalition through military operations, joint exercises, trade and economic relations. We have growing ties with most of the countries on China's

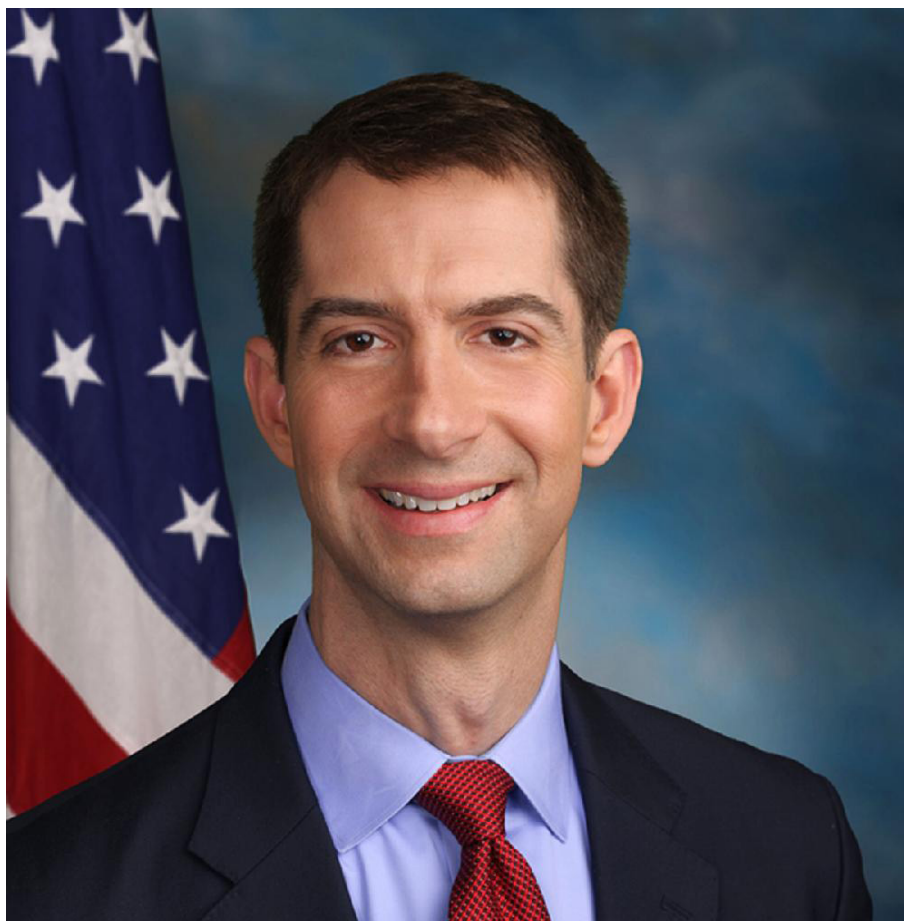
periphery, and political and diplomatic measures as well. We've had them with us in the fight over sovereignty in the South China Sea.

If America leads, and we have especially strong allies among the democratic nations on China's periphery, I think we can effectively lead a coalition that will check Chinese ambitions.

Taiwan is obviously a special case because both sides contend that there is one China. United States policy is and should remain that it will ultimately be for the people of mainland China and Taiwan to decide their political futures. But the one thing we will not tolerate is any forcible effort by mainland China to reunite Taiwan. That has to be solely the result of free and open negotiations and diplomacy. It's ultimately a choice for the Taiwanese people and the people of mainland China.

The United States' role in that is to uphold our commitments under the Taiwan Relations Act to continue to sell Taiwan the kind of weapons it needs to defend its autonomy from potential attack by mainland China. And we must defend Taiwan diplomatically around the world. China is once again trying to poach the few remaining countries that recognize Taipei as China's government, as opposed to Beijing. And they continue to try to exclude Taiwan from organizations like the World Health Organization (WHO) and the International Civil Aviation Organization (ICAO). As we saw earlier this year with an outbreak of the virus, it would have been much better if Taiwan had at least observer status at the WHO. These are the kinds of things the U.S. can do to help Taiwan preserve its traditions and its autonomy while upholding our commitments to Taiwan under the Taiwan Relations Act.

iF: IN YOUR VIEW, COULD THE UNITED STATES PUT U.S.-MANNED AIR DEFENSE SYSTEMS ON TAIWAN? NOT SELL THEM, BUT ACTUALLY MAINTAIN THE AIR DEFENSE SYSTEMS THERE.



Senator Tom Cotton.

Sen. Cotton: I certainly favor putting advanced air defense systems in Taiwan. I'm also aware that the Taiwanese military is more than capable, with the right training and equipment from U.S. defense contractors, to operate all these systems. I would say that any consideration of the presence of U.S. forces in Taiwan would be done only in close consultations after careful deliberation with the Taiwanese government. In addition to accelerating and expanding arm sales to Taiwan, we should also invite Taiwanese military personnel into U.S. military exercises. The kinds of naval exercises, for instance, that we conduct in Hawaii every year, or some of our shared exercises in the Western Pacific and the South China Sea. I think that would be useful both for the United States Navy, the United States military more broadly, as well as the Taiwanese military.

iF: WOULD THE JAPANESE OR SOUTH KOREANS CONDUCT AN EXERCISE WITH THE U.S. NAVY AND TAIWAN?

Sen. Cotton: I believe they would if the U.S. makes it clear that we think it's a high priority for our common defense posture in the East China Sea and the South China Sea, especially if it's at a large multi-lateral annual event, such as RIMPAC exercises near Hawaii.

Allowing Taiwan to participate in something like RIMPAC, or in some of the less regular, more tailored exercises that we conduct in the Western Pacific, is always condemned by Beijing. The Chinese government always threatens grave consequences, yet when it comes to pass, it seems to issue sternly worded communiques and not much more. It reminds me of the decision to finally move our embassy in Israel to Jerusalem. That was supposedly going

to preclude, once and for all, any kind of peace deals in the Middle East, yet just a couple of years later there was a breakthrough agreement to normalize relations between the United Arab Emirates and Israel. The “smart” for-

city. Congress has also taken action. We passed the Hong Kong Autonomy Act, which mandates further sanctions against communist officials and financial institutions that aided the crackdown. Going forward, we should

administration are as well. It’s not just the base in Djibouti. China also views its soon-to-be-base in Gwadar (Pakistan), and then hopefully, in Beijing’s eyes, a base in or around the Strait of Hormuz, the Persian Gulf, and the Gulf of Aden, to be a way to encircle key choke points in the Middle East. Djibouti allows them to have a degree of control over the Red Sea and the Bab al-Mandab Strait, which is critical for access to the Suez Canal. And if they get a base somewhere on the Arabian Peninsula, in the Strait of Hormuz, it will allow them to secure their energy supply lines coming out of the Middle East, but also allow them to hold at risk the energy supplies of so many other nations. Not so much the United States anymore because of our fracking revolution, but Europe, Japan, and other countries who depend still on Middle Eastern oil.

We ought to be very concerned about the base they already have on the Red Sea, but also the potential to turn their port at Gwadar into a military base. Especially any effort to open

We cannot have a world in which the United Nations has imposed a conventional arms ban on Iran but China is selling it advanced drones and Russia is selling it advanced air defense systems.

eign policy set always has reasons not to take actions like bolstering Taiwanese defenses or training together with them. Those reasons often come not to pass when you do it in reality.

iF: THAT’S A GOOD THOUGHT TO CARRY AROUND TO LOTS OF DIFFERENT PLACES IN THE WORLD, INCLUDING PERHAPS TO HONG KONG.

Sen. Cotton: What has happened in Hong Kong is a tragedy. The regime in Beijing has cracked down on Hong Kong’s centuries-old traditions, its democratic autonomy under their joint declaration with the UK when they resumed sovereignty over Hong Kong. It shows how intent [President] Xi Jinping is on consolidating power inside of China for the communist party, consequences outside of China be damned. He was willing to take the economic, financial, and political hit that came from cracking down on Hong Kong because he didn’t want to have it as a democratic example on Chinese soil.

The administration has already taken a number of actions, which I support, including revoking Hong Kong’s special economic status, imposing sanctions on party officials, and ending our extradition agreement with the

continue to act where we can. The U.S. should make Hong Kong less attractive as a financial hub for investment into mainland China because we shouldn’t allow the Chinese Communist Party and its oligarchs to get rich off of special status if Beijing is no longer recognizing that special status.

The U.S. should make Hong Kong less attractive as a financial hub ... we shouldn’t allow the Chinese Communist Party and its oligarchs to get rich off of special status if Beijing is no longer recognizing that special status.

iF: THE BELT AND ROAD INITIATIVE FOR CHINA GOES INTO CENTRAL ASIA AND INTO THE MIDDLE EAST, AND CHINA HAS ITS ONE AND ONLY FOREIGN NAVAL BASE IN DJIBOUTI, ABOUT EIGHT MILES FROM U.S. FORCES IN THE RED SEA. IS OUR GOVERNMENT CLEAR ON THE IMPLICATIONS?

Sen. Cotton: I’m clear about China’s intentions in the Middle East, and I know that the president and others in the

a military base on the Arabian Peninsula that could hold the Strait of Hormuz and the Persian Gulf at risk. The administration is following those developments very carefully and working with our partners in the Middle East to try to ensure that China doesn’t have de facto sea control over some of the world’s most critical waterways.

iF: THERE ARE RUMORS THAT THE CHINESE ARE GOING TO OFFER THE LEBANESE MONEY TO REBUILD



Demonstrators in Hong Kong protest their city's new extradition law with China. (Photo: Studio Incendo)

THE PORT OF BEIRUT AFTER THAT EXPLOSION AND YOU KNOW WHAT THEY WANT IN EXCHANGE FOR THAT. WHAT IS THE POSSIBILITY THAT WE END UP WITH A CHINESE BASE IN BEIRUT?

Sen. Cotton: It's certainly possible because you've correctly stated China's ambitions, but we ought not allow it to happen. The United States with its partners, especially its Arab partners, ought to work in concert to prevent China from establishing an additional foothold on one of those critical waterways in the Eastern Mediterranean. That is in no one's interest. It's not in Israel's interest. It is not in Lebanon's interest to become essentially a debtor client to the Chinese Communist Party,

or in the interests of the Arab nations that could partner with Lebanon. What happened in the port of Beirut is a terrible tragedy, but it would also be tragic to allow that explosion to give the Chinese communist government a foothold in the Mediterranean.

iF: THE U.S. HAS ARMED AND TRAINED THE LEBANESE ARMED FORCES (LAF) FOR YEARS. WE EXPECTED IT TO PROTECT THE COUNTRY, PROTECT THE PEOPLE, MAYBE TO WORK AGAINST HEZBOLLAH. BUT DURING RECENT DEMONSTRATIONS, THE ARMY ACTUALLY FIRED ON DEMONSTRATORS IN BEIRUT. SHOULD THE U.S. CONTINUE TO ARM AND TRAIN THE LAF? ARE THEY BEHOLDEN TO THE HEZBOLLAH GOVERNMENT?

Sen. Cotton: I'm concerned about how Hezbollah works to co-opt the Lebanese Armed Forces as it has done with other Lebanese government institutions. At the very least, the aid we provide to the LAF should come with conditions that it does not become an arm of Hezbollah, but also that it would act against Hezbollah terror cells and missile depots. The Department of Defense needs to continue to monitor our arms shipments to prevent them from being diverted to Hezbollah. The Pentagon also needs to monitor the actions of the Lebanese Armed Forces relative to their own citizens, as we do with so many other nations to which we supply arms.

That explosion again was a terrible tragedy. But if there can be any positive developments from the explosion,

it might be that the Lebanese people are beginning to sour on Hezbollah and its role in the government. Remember the group has so many of the key governmental posts, all the ministers of which have now resigned. Hopefully the people of Lebanon, working with our allies in the region, such as France - which has long historical interest there - can help

the Obama administration gave them pallets of cash, they were flush with a strong and growing economy.

President Trump's decision to withdraw from the Iran nuclear deal has had positive secondary effects, putting aside the implications for Iran getting a nuclear weapon. The fact that Iran has a weak and deteriorating economy, so it

military capability requirements. So the U.S.-Israel Operations Technology Working Group, as we propose to call it, could develop combined plans to research and field weapon systems as quickly and affordably as possible so we can get them out to our troops on the front line, both American and Israeli. Above all, the legislation will help the United States and Israel through our combined technological capabilities win the military and technology competition already underway with Russia and especially with China.

U.S.-Israel Operations Technology Working Group
... could develop combined plans to research and field weapon systems as quickly and affordably as possible so we can get them out to our troops on the front line...

iF: WE HAD AN INTERVIEW WITH AN ISRAELI GENERAL WHO SAID THE AREA OF TECHNOLOGY CONCERN IS EXPANDING BECAUSE OF CHINA. IS THE U.S. CONSIDERING MORE THINGS NOW TO HAVE DUAL-USE MILITARY APPLICATION THAN WE USED TO AND THEREFORE BEING MORE RESTRICTIVE?

the new government move in a way that excludes Hezbollah's influence. More than any time in recent years, there is a chance to do so through Lebanon's government institutions, and that's especially true of the armed forces.

iF: COULD YOU TALK TO US ABOUT THE MAXIMUM PRESSURE CAMPAIGN AND ITS IMPACT ON THE IRANIAN ECONOMY?

Sen. Cotton: The maximum pressure campaign has yielded great dividends over the last two years or so. The economy has declined by almost 10 percent; and will probably see an even worse decline this year because of the global contraction related to the coronavirus. That means that Iran's coffers are now relatively bare but they have a lot of mouths to feed all around the Middle East, from the paramilitary forces in Iraq, to Hezbollah in Lebanon, to the Houthis in Yemen, and various proxies in Syria. And they just don't have enough money to go around. That was not the case five years ago. After

can no longer generously support all of its proxy forces around the region. Its own people are growing weary of having a government that's so incompetent that it shoots down civilian airliners as they did to the Ukrainian airplane back in January. These are all things that flow from the decision to withdraw from the Iran nuclear deal.

iF: YOU ARE ONE OF THE CO-SPONSORS OF THE U.S.-ISRAEL MILITARY CAPABILITY ACT OF 2020.

Sen. Cotton: U.S. defense cooperation with Israel is already very deep and very broad, but there are some dangerous gaps in our capabilities that would be closed if we collaborated more on research and development (R&D). The U.S. already has a bilateral working group, the Defense Acquisition Advisory Group, but that's focused more on acquisition and sustainment, and less on research, development, and engineering (RD&E). We propose a permanent and dedicated forum for our countries' militaries to share intelligence-informed

Sen. Cotton: Yes. As military competition has grown more technologically advanced, sectors of our economy that used to be primarily civilian, focused on non-military purposes have military application. Information technology, quantum computing, artificial intelligence. We're not the only ones that recognize that. The Communist Party in Beijing has what they call "civil military fusion," which harnesses the power of their own tech sector for the benefit of the People's Liberation Army. They have laws that specifically demand that civilian companies cooperate with and turn over technology to the military of China. It's just a fact of modern life. Things that were once seen as purely civilian in use are increasingly dual-use, both civilian and military, and we have to be mindful of that change.

iF: AND IS THIS ONGOING COOPERATION WITH ISRAEL GOING TO HELP DEFINE THOSE AREAS FOR BOTH SIDES?

Sen. Cotton: Yes. One of Israel's great advantages in the world, both economic and military, is it's incredibly dynamic and innovative people have led to one of the world's truly outstanding high-tech sectors. Those high-tech industries will increasingly be useful, not just for civilian purposes, but for military purposes as well. Same thing with ours.

iF: HOW WELL CAN NATO WORK IN THE MIDDLE EAST WITH TURKEY ON ONE END, OR IN THE CENTER OF EUROPE WITH GERMANY BEING RUSSIA'S BIGGEST CLIENT FOR ENERGY?

Sen. Cotton: It is regrettable that Germany depends so much on Russia for its gas. It is entirely unacceptable that Germany has gone to the greatest lengths – to include intimidating, threatening,

Russia to do because Germany has a strong economy on which Russia is very dependent and therefore it would fight back. Germany doesn't want to be dependent, though, on the vagaries of Eastern European politics and Russian meddling on the Eastern flank of NATO and the EU. So, they've decided to build a pipeline through the sea. I've taken action along with a handful of other senators and the administration to try to prevent that pipeline from being completed through very aggressive sanctions. Its completion would mean Russia could turn off the gas or take any other action against countries east of Germany in the dead of winter, while Germans sit comfortably in their warm living rooms, indifferent to the plight of Estonians, Poles, or Ukrainians. This is entirely a deliberate decision in Berlin that they never should have taken.

...we're more likely to exert the kind of influence we need over Turkey to play a positive and constructive role in things - like countering Iran - with Turkey in NATO than Turkey out of NATO.

smaller NATO and European Union partner nations – to try to get the Nord Stream Two Pipeline built through the Baltic Sea. This is one of the worst things that a NATO ally can do to the others, or to a country like Ukraine, that's constantly being threatened by Russia. They currently get all that gas through a series of pipelines that run through Eastern Europe into Germany and beyond. That means that if Russia wants to exert influence through energy politics on countries, such as the Baltic nations or Poland or Ukraine, it has to also cut off gas to its main client, Germany.

That's politically very hard for

We should use every possible avenue of our national power to stop that from happening. It's still in a pause, but it's a very close-run thing. They only have five percent left of the pipeline to build.

As for Turkey and its role in NATO, I'm very concerned about the trajectory of Turkey over the last 20 years and also U.S.-Turkish relations. The Turkish government under [President Recep Tayyip] Erdogan has taken a number of actions hostile to our interests, and our allies, just in recent months, to say nothing of the last 20 years. They purchased a Russian air defense system. They aggressively are intervening in the

Libyan civil war. They've been very aggressively trying to lay claims to oil and gas in the eastern Mediterranean Sea. And they continue, of course, to bankroll and protect Hamas operatives and affiliates and the Muslim Brotherhood throughout the region.

We have to draw a firmer line with Turkey. For instance, that they'll have access to Russia's S-400 air defense system or the U.S. F-35 fighter jet, but they won't have both. At the same time, we have to build on areas of common interest as a NATO partner, like containing Iran and trying to work through, as best we can, a lot of these thorny issues. I hope that we'll see some improvement in the government of Turkey. I hope the government of Turkey will become more responsive to its large and pluralistic people.

iF: IS IT BETTER TO HAVE TURKEY IN NATO THAN TURKEY OUT OF NATO?

Sen. Cotton: I think we're more likely to exert the kind of influence we need over Turkey to play a positive and constructive role in things - like countering Iran - with Turkey in NATO than Turkey out of NATO. It's not even clear how you'd go about removing any member nation from NATO. Having them in our multilateral alliance, we ought to work, as best we can, to try to improve their cooperation with us on bilateral terms, but also to improve the way they're operating within NATO. We want to try to minimize the slow pace of decision-making and delays that often emanate from Turkey and its delegates to NATO.

iF: YOU HAVE COVERED AN AMAZING AMOUNT OF TIME AND SPACE HERE, AND I CANNOT TELL YOU HOW MUCH WE APPRECIATE YOUR ANSWERS. THIS IS ONE TERRIFIC INTERVIEW. ON BEHALF OF JPC AND OUR inFOCUS READERS, THANK YOU, SENATOR COTTON.

Israeli Military Launches Radical New Digital Maps

by ZAK DOFFMAN

“Imagine a tourist arriving in a foreign city,” the Israeli intel officer tells me. “The first thing they do is open Google Maps and look for a restaurant. Google helps them find a place. Helps them navigate. Helps them get there on time. We do the same.” Well, not exactly. The augmented reality mapping application Lt. Col. “N” is describing is designed to find hidden terrorists, not restaurants. “Mistakes can be fatal,” he tells me, “we need to get the right house on the right street.”

Welcome to the battlefield of the future – artificial intelligence, multi-source data fusion, augmented reality. Everything edge-based and real-time. Except this isn’t really a battlefield, as such. “What happened to us,” the officer tells me, “is that our enemies have adopted a technique to merge into urban areas populated with civilians, we need to unveil the enemy, precisely, to neutralise them and stop the threat.”

So, now you start to get the picture. This is counterterrorism powered by AI, this is about creating an asymmetry, shifting the balance of power. Think Google Street View – except it’s not Google. And an augmented reality overlay that comes from the fusion of multiple sources of highly classified intelligence, not big tech’s cloud servers. And if that isn’t enough, there’s also AI running pattern analytics on prior enemy tactics, techniques and procedures to infer what a hidden enemy is likely to do next, in real time.

This military augmented reality is not unique – such systems are already under development, gaming-style

headsets overlaying friendlies and likely combatants, helping targeting and the avoidance of blue on blue. Israel’s new system is different, though. The augmented reality comes from the fusion of multiple intel sources, the intent is not to present ground troops with an advanced gaming-style view of the battlefield, but to use live data to infer where actual targets are hiding.

intent is to root out threats, but also to keep others safe, to avoid collateral damage. “We need to make sure we only target the aggressor and not any civilians,” LTC “N” tells me.

This convergence between real-life conflict and ever more realistic gaming-style graphics has been developing for years now. During the Iraq conflict, there was that inference that here’s a

...the Internet of Battlefield Things envisages a mix of human operators and autonomous machines, all powered by fast communication networks...

Nowhere is this more important than in an urban environment. This isn’t just a matter of where the enemy might be hunkered down based on visuals and a map of the terrain. This can fuse data sources to understand the ownership, history and usage of specific buildings, the results of prior surveillance activities. And the millisecond new data is received and processed, the entire map updates for everyone involved.

Picture this Street View lookalike again – no screenshots, I’m afraid, it’s classified. Arrows and graphics explain to a soldier on the ground why the third-floor apartment with the wrought iron balcony is deemed a hostile environment, why anyone exiting the building can be considered a combatant. The

generation of young soldiers more inured to the horrific visuals of a battlefield than previous generations by the combat games they’ve played. You can add to this the remote piloting of lethal drones on kill missions, all from pods thousands of miles away.

Israel’s idea for this “intelligence saturated combat” has been a decade in the making. The new program sits within Unit 9900, the visual intelligence operation (think of maps, satellite imagery, image analysis) within Aman, the country’s military intelligence directorate, and sister unit to the better known 8200 signals intelligence unit. Unit 9900 generated headlines a few years ago when it was reported that it was recruiting autistic teenagers for their unique analytical skillset.

As LTC “N” describes the work of his team, “the development of 3D mapping that is as realistic as possible,” he continually refers back to the modern-day explorer’s Google Maps view of the world, that feeling of familiarity. Yes, the location might be strange, but the viewpoint is well known, understandable in real-time. “We have to build something with that user experience,”

overcome, I’m told, include distilling this intel, “terabytes every day,” into what is useful and relevant. That’s the role of the AI, the pattern analytics. The window is short – soldiers are given five to ten seconds to decide on any action they take. They are trained in the field with the technology, their feedback hones the program itself, “what to develop further and what to ditch.”

“recognizes patterns of enemy behaviour – and can understand where the enemy is and what they’re planning.” This is overlaid with real-time intel, including open-source data on the terrain and the environment.

There has been a lot of talk about the fusion of the cyber and physical domain in the last year, not least from Israel, which became the first country to mount a physical military response to a cyber-attack. A few weeks later, the U.S. did the opposite. This new concept of an “intelligence saturated battlefield” can take the cyber domain and feed it directly to troops on the ground. Those same soldiers are connected with sensors, everything feeding back to the central intelligence system.

LTC “N” often refers to the “disappearing enemy.” He means the urban shadows where combatants and civilians blend together, disasters waiting to happen. Yes, this new style of AR combat is intended to sharpen responses, but also to avoid mistakes. The officer explains that the AR display provides enough information to let soldiers understand why a location has been

The challenges the new unit has overcome, I’m told, include distilling this intel, “terabytes every day,” into what is useful and relevant...

he says, “our soldiers crossing the border for the first time must be familiar with the environment.” It’s hard not to conjure images of gaming graphics as he says this – that level of familiarity.

This “intelligence saturated” viewpoint can be presented to the soldier on a smartphone or tablet, all off the shelf and “mostly Android,” or streamed directly into their binoculars or weapons sights. “They don’t know where the intel comes from,” LTC “N” tells me, “but it reaches their sights, their C2 systems in real time.” The officer stresses that all targeting decisions are taken by the soldier on the ground, not by the system itself, this is an aid, not an automated targeting system.

That differentiation is critical. IoBT – the Internet of Battlefield Things – envisages a mix of human operators and autonomous machines, all powered by fast communication networks, algorithms that empower rapid decision-making based on data and inferences. But the final decision sits with a human operator, the world isn’t ready – at least not publicly – to fully pitch man against machine.

The challenges the new unit has

And the beauty of AI is that the more data you have, the larger and more diverse your datasets, the more powerful your thinking machine becomes. Currently this is early-stage – fast forward a few years, though, and

There has been a lot of talk about the fusion of the cyber and physical domain in the last year, not least from Israel...

that asymmetry between the haves and the have nots where this level of tech is concerned will be staggering.

But back to the here and now – putting the complexity to one side, this is a 3D, photo-realistic map, “the backbone onto which we build our intel – preliminary and real time – to understand the area and what the enemy is doing in real time.” By mining data from previous combat experiences, the AI

deemed hostile – but the final targeting decision is theirs, and if they don’t understand they won’t act the right way.

I’m told that this new program within Unit 9900 has become a development hotbed, learning its approach from industry. Inside the “joint lab” you’ll find intel, combat troops, cyber and communications, Israel’s Defense Advanced Research Projects Agency (DARPA) equivalent, defense

contractors, even start-ups. When something new is envisaged, it's prototyped and given to ground troops to field test. Their feedback hones the capability or consigns it to the bin.

The military world has changed, LTC "N" tells me. "We needed to imagine new methods of fighting – as much as possible we use tools created outside the defense industry. We take civilian and open-source as much as possible, we access research from all over the world to help us deliver state of the art products."

You can think of this mix of reality and augmented reality, of converged commercial tech and mil-spec systems, of autonomous machines mixing with human operators as Battlefield 2.0. And while today this might seem to be all about augmented overlays, it's really about painting an AI-driven picture for the soldier to empower decision making.

Imagine a vast array of connected sensors linked to a thinking machine that can compare what it's seeing in real time with all the battlefield experience that has gone before. Nothing is a better predictor of the future than the

Imagine a vast array of connected sensors linked to a thinking machine that can compare what it's seeing in real time with all the battlefield experience that has gone before.

past. Lower level surveillance monitoring decisions made autonomously by an AI module – identifying risks and potential hostiles, saving military time, resources and potentially lives.

I'm told that Israel has accepted that "mil-spec" is not always best – why not plug into the billions of investment



An IDF soldier working in Unit 9900, a visual intelligence unit that specializes in gathering optical information from numerous sources to provide intelligence. (Photo: IDF)

dollars piling into mapping and AR and AI, repurposing those capabilities for this? "We keep the user experience as straightforward as possible... Google Maps is a good model – how you see the world as a tourist, when you know what you see and understand where you're going."

This new program is now ripe for

No details on any other countries using the tech, of course, no specifics on intel sources – all highly classified. "I can tell you this is a real-time bridge between intel and soldiers (intel wants to keep its secrets), combat operators want that intel in real time." Testing of the new capabilities started this year.

You can add this IDF program to the multitude of new AI, IoT and AR systems being procured and developed by military customers world-wide. The concept of real-time dissemination of live intel from multiple sources, right to a soldier's C2 or weapon's sights is novel. The challenge is that the soldier must remain the decision maker. The biggest takeaway from any system like this is chilling – If there's ever any implication that targeting has been automated, that a kill switch or trigger has been handed over to the lightning reflexes of a machine, then the military world will have changed and there will be no going back.

ZAK DOFFMAN is Chief Executive Officer of Digital Barriers, a provider of advanced surveillance technologies to the international homeland security and defense markets.

A NATO Urban Delaying Strategy for the Baltic States

by Col. GARY ANDERSON, USMC (Ret.)

Eastern Europe was once the bulwark of the old Soviet Union but it has become NATO's first line of defense against a resurgent Russia. The NATO alliance now faces the same problem that the French-British coalition faced at the dawn of World War II. Great Britain and France had assured Poland that they would come to its aid in the event that it was attacked, but when the Germans crossed the Polish border in 1939, there was no way that the allies could move quickly enough to assist their eastern partner. A 2016 Rand Corporation war game showed that while the situation is better today it will be hard to quickly reinforce Eastern Europe in time to prevent the Russians from overrunning the Baltic states of Lithuania, Latvia and Estonia.

The game would tend to vindicate critics who believe that NATO's eastern expansion was ill-advised, but that is now water under the bridge. U.S. military planners have been trying to come up with

In an article for the *The National Interest*, David Axe quotes an *Army Times* article by Kyle Rempfer noting, "This summer, [troops from] Latvia and Poland traveled to West Virginia for the program. Both nations have newly invigorated homeland defense forces capable of pushing back against an invading force and opposing a potential occupation."

Rempfer continues: "The units are trained to provide response during the early stages of a hybrid conflict. Their tasks could include slowing the advancing units of an aggressor nation by destroying key transportation infrastructure such as bridges, attacking enemy forces at chokepoints, and potentially serving as forward observers for NATO aircraft responding with air strikes."

While this approach might give NATO some tactical force multipliers, as a meaningful strategic deterrent it is probably a minor stumbling block for the Russians. This is true for two reasons. First, the Baltics are relatively flat and

warfare in the open against tank-heavy Russian forces would not provide a realistic deterrent. This does not mean that such an idea is totally without merit. Placing irregular warfare in an urban context holds real promise.

■ Urban "Festung" Approach

Any successful Russian thrust into one or more of the Baltic states depends on the calculus of speed. Russians need to make the action a fait accompli before NATO reinforcement can arrive. The previously mentioned 2016 Rand war game indicated that current NATO capabilities cannot properly offset the Russian 6-1 armor advantage in the Baltics in a timely manner. However, if key Baltic urban areas can be turned into potential urban fortresses, the equation changes radically.

Hitler's concept of turning German cities into fortresses [*festungs*] at the end of World War II has been justifiably derided, but the Russian successes at Leningrad and Stalingrad were keys to Soviet victory on the Eastern Front in that conflict. The Germans also used urban fortress tactics as an operational tool effectively earlier in the war. The difference between the two was that the Soviets always had a viable plan for relieving the cities; by 1945, the Germans did not have that capability. The *festungs* were doomed to defeat in detail.

NATO has a plan for relieving the Baltics, but in its present state it is likely that it will be an attempt at liberation rather than relief. However, the credible threat of a Russian *coup de main* being held up by a series of urban strong points would give Moscow serious second

U.S. military planners have been trying to come up with non-traditional ways to deter Russian adventurism in the Poland and the Baltics for several years.

non-traditional ways to deter the Russians from adventurism in Poland and the Baltics for several years. One of their schemes has been to turn the Russians' use of hybrid warfare against them in the form of non-uniformed and uniformed partisans in the event of a Russian invasion.

do not have the mountains and dense forests that are conducive to guerrilla warfare. Second, the brutal Russian approach to counterinsurgency would see any tactical gains outweighed by the cost of reprisals to the civilian population. Simply stated, the threat of irregular



Joint Terminal Attack Controllers from the Latvian National Armed Forces conduct close air support training with U.S. Air Force. (Photo: Master Sgt. Scott Thompson)

thoughts about the viability of a lightning strike into the Baltics.

■ Strategic Deterrence

It is difficult to measure the efficacy of strategic deterrence except after the fact due to the difficulties of proving the negative case. But we do have some good evidence of what basic elements constitute credible deterrence. First, that the nation or alliance can demonstrate the will to fight if needed. During the Cold War in both Europe and Korea, a series of scheduled exercises demonstrated that will.

Second, a show of credible capability to back up the will to fight is also necessary. Capability exercises and technical demonstrations can do this although they always run the risk of giving the potential enemy information on friendly technological developments. One has to wonder whether clear demonstrations of the power of French machine guns and rapid firing artillery prior to World War I might have shown the Germans that the dependence on rapid strategic movement called for in the Von Schlieffen plan was misplaced.

The reality of deterrence in the Baltics would be in creating a mindset among

Russian strategic and military planners that an adventure in that region would not be worth the risk. The ease with which the Russians retook Crimea may well have created hubris in Moscow. Disabusing the Russians of that mindset is critical in avoiding war by miscalculation.

■ Operational Readiness

Using unconventional delaying means in an urban context will require creating a coherent doctrine for urban defense in the Baltic region and training and equipping local forces to implement that doctrine. This requires the creation of a unified vision for a Baltic urban delaying strategy by the nations in question as well as creating a consensus that that this approach is feasible at the operational level of war. Each urban area is unique in culture and outlook, but a successful urban delaying effort must have key components:

Logistic Feasibility: A successful delaying urban action will mean that each urban area must be self-sustaining in a situation where it may be surrounded and isolated for up to a month while NATO forces deploy and organize a counterattack. This means that water,

food, ammunition, and medical supplies must be stocked down to the neighborhood level.

Coordinated Fire Support: Urban areas provide natural choke points that can be exploited by fire and local maneuver with NATO proving precision firing? and a variety of assets providing the eyes on target. But to be effective, local observers must be trained in how to call-in fire correctly and recognize worthwhile targets among the clutter of urban combat. The plethora of security cameras that now dominate the urban landscape can integrate with and augment the human sensor-to-shooter grid, but it will require big data to separate the targeting wheat from the proverbial chaff.

Centralized Commander's Intent- Decentralized Execution: The Russians almost certainly can disrupt any attempt by a city to exercise centralized command and control in its defense, so execution should be decentralized to the maximum extent possible, applying previously determined commander's intent.

One thing the Marine Corps found early-on in its 1990s Urban Warrior experiments was that the Red Teams defending urban areas were inherently

superior to the Blue attackers who were trying to execute predetermined experimental tactics. Having had time to familiarize themselves with the terrain and unconstrained by fixed doctrine, these Red Teams almost always had an innate advantage over Blue as they could improvise and use their imagination. NATO should exploit this advantage and allow

suggest that NATO provide Baltic states unconventional forces with training and technology to include sniper and sabotage techniques, night vision equipment, and drones – presumably both armed and unarmed. Recent Army futures war games have examined this urban approach and found it promising.

Such an approach would also benefit

To be a credible deterrent, an urban delaying strategy must demonstrate the will of the populace to accept the damage and casualties that war will bring if deterrence fails.

neighborhood defense units the latitude to use maneuver warfare to adapt their tactics to the unique terrain in their individual and unique battle space.

A Neighborhood Watch on Steroids: A key tactic in recent Russian operations in Crimea and the Ukraine has been the use of Spetsnaz and irregular force to seize and/or disrupt key locations and communications in advance of regular forces. Any successful urban delaying action must defend effectively against such efforts in their early stages. Local residents must be trained to immediately report suspicious activity, and local police and paramilitary forces prepared to deal quickly with attempts at sabotage. The defensive urban campaign would be a disconnected series of neighborhood battles that may not be fully coordinated until NATO reinforcements arrive. The Russians are adept at disrupting urban communications grids. The key to success will be creating an atmosphere of decentralized chaos that impacts the Russian attackers more seriously than the urban defenders.

Tactics, Techniques, and Technology: Weaponizing an urban delaying strategy in a way that will make it a credible deterrent will not be overly expensive, but it will require a new approach to tactics and training. Rand analysts

from other elements designed to give an asymmetrical advantage to urban irregular troops augmenting regular forces:

Teleoperated Tanks: Any vehicle can be rigged for teleoperation. Older, obsolete tanks can be easily reinforced structurally and reconfigured as assault guns and placed around key infrastructure and choke points. They do not need to go far and can be concealed from aerial targeting in parking garages and other structures providing overhead cover. Due to Russian expertise with electronic warfare jamming, they should be fitted with both frequency hopping radio and fiber-optic controls. They would be useful against Russian armor as well as “little green men” if configured with both anti-tank and anti-personnel weapons.

Integrated Targeting: NATO has a tremendous capacity for precision targeting that would cause minimal urban collateral damage. To be most effective, it requires precision target acquisition. As mentioned earlier, a combination of civilian eyes on target and the network of security cameras now ubiquitous in almost all of the developed world’s major cities can give excellent coverage. However, such targeting sensors must be combined with big data. This will require integration with NATO’s fire support system. This will require much coordination and

training, but it is feasible.

Low Impact Exercises: Coordinated defense of an urban area will require repetitive exercises to get everyone on the same sheet of music. A Russian attack will most likely depend on stealth and surprise in its initial stages and the speed with which the population and its defenders can react will be critical in defending against an urban *coup de main*. Such exercises need not be disruptive. Success will depend on getting key players into position to provide overwatch, protect critical infrastructure, and tie in with NATO. They have the advantage that they can be conducted quietly during normal working days and holidays without major disruptions to urban life. These should be augmented by tabletop neighborhood level war games that would allow irregular local defense forces to design improvisational tactics to anticipate various Russian approaches.

■ The Importance of Will

To be a credible deterrent, an urban delaying strategy must demonstrate the will of the populace to accept the damage and casualties that war will bring if deterrence fails. To be sure, not all of the populations of Baltic urban areas will buy in.

All three Baltic states have residual Russian ethnic populations which might welcome a return of their brethren. The Soviet occupation ended three decades ago and many citizens – particularly millennials – never knew the thinly-disguised weight of oppressive Russian domination.

However – as in all civil societies – 20 percent of the people do most of the heavy lifting. It is the determination of that element that will be needed to deter Russian aggression.

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The Marine Corps: A New Beginning or the End?

by Maj. Gen. **MICHAEL SULLIVAN, USMC (Ret.)** and
Maj. Gen. **JARVIS D. LYNCH, JR., USMC (Ret.)**

Commandant of the Marine Corps General David Berger's "Force Design 2030" has caused quite a stir. The document envisages a shifting of the Marine Corps from a "Second Land Army" force to a "commando-like infantry force with nimbler weapons: drone squadrons will double and rocket batteries will triple." There is more, much more. Force Design 2030 has its supporters, including Secretary of Defense Mark Esper, and there is certainly support in the active duty Marine Corps, an organization noted for its historic loyalty to the Commandant. There are, however, skeptics within active duty ranks and the large population of former Marines, retired and otherwise.

All things considered, it is a subject definitely worth discussion.

The underlying purpose is to draw closer to the Navy by assisting in gaining control of the South and East China Seas in the event of war against China. The heavily wargamed FD 2030 Concept of Operations envisages the change of infantry regiments to "Littoral Regiments." Simply stated, the Littoral Regiments would be organized, trained, and equipped to infiltrate small units (50 to 100) Marines ashore on any of the multitude of islands available in both seas.

Also to be smuggled ashore would be long range anti-ship missiles. The missiles, located in commercial shipping containers, would be transported to hiding places by rented civilian trucks. The Marines and their equipment would remain separate from the population. When needed by the Navy, the Marines located on the appropriate island would

be notified of the targeted ship and its location. The Marines would then move the missile from its hiding place to its launching location, activate the targeting and launching systems, and sink the Chinese target.

■ *What China Knows*

Chinese activity in the information collection business has been the topic of many news reports. China has a finger in every pie, including, of course, the U.S. military. There is no rational reason to assume that Chinese are not now, or will not soon be, quite familiar with Force Design 2030 and its stealth mode of operation, including shipping container involvement.

We have learned that shipping container operations are much more complex than one might think. Locals must be involved, especially if the containers are to be brought to small islands by smaller container ships. Arrangements must be made for discharging and delivering the containers and needless to say, there is the required inspection of the container contents. The system is fraught with security loopholes.

Information surrounding the eventual introduction of two Light Amphibious Warfare Ships implies that these ships would be used to load, transport and offload missile containers. What is not addressed is how this could be done without Chinese knowledge of the ships' ownership and the cargo. Considering the Chinese interest in controlling the China Sea islands, it would be interesting to learn how the wargames work around the loopholes in a vulnerable

container accounting and handling system that includes customs inspections.

The commercial container operation is complicated, involving among other details, a customs inspection at the receiving port or beach. The container system is vulnerable to security leaks and inevitable exposure.

■ *The Economic Context*

Money counts, but no published writings examining FD 2030 within the context of Chinese and American economic situations have been found.

China today is using economic power to acquire control of, among other things, world supply chains, manufacturing, businesses, distant seaports, and merchant shipping lanes. And if those are not enough, we have been too placid about the obvious copying of American military and naval equipment, including aircraft and ships.

China had been running amok until her progress was slowed during the past few years by the imposition of tariffs and other measures to stop economic outrages such as theft of American intellectual property. Prior to the coronavirus pandemic, there were signs that America's actions were having an effect. Predictions that China's economy was headed for trouble had become commonplace. China's pandemic behavior has caused itself even more problems. For example, The Voice of Europe publication recently noted that Britain, the European Union, the U.S. and Japan are taking measures to break the stranglehold Communist China has on the world's supply chains by bringing home businesses from

China, "... unelected Communist Party bigwigs are said to be in a state of panic."

Should that exodus of businesses occur, China's power would be greatly diminished and the need for focus on the China seas dramatically reduced.

Meanwhile, America has spent years helping the Communist Chinese become a dominant world economic

And given America's dangerously large and mounting debt, the nation's political class must eventually start looking for new money sources. Prime targets will be the national defense in general and a Marine Corps organized and trained to fulfill something other than the force in readiness mission so useful to the nation in particular.

Force Design 2030 ... is to draw closer to the Navy by assisting in gaining control of the South and East China Seas in the event of war against China.

power. During that process and others, the American national debt became astronomical and is growing. It is now somewhere north of \$25 trillion and destined to grow to even greater levels as the government spends trillions more fighting the economic effects of the coronavirus pandemic shutdown and the need to help finance the return of companies to the United States.

Adding more gloom to that financial situation is the fact that there are those in Washington eager to spend trillions more on such socialist dreams as the Green New Deal, government-controlled health care, free college tuition for all, reparations for slavery, and of course, the ever present "need" to bail out states that have been mismanaging funds, budgets, and retirement benefits for state employees for years. Not satisfied with those fiscal adventures, Washington is also considering as much as a \$3 trillion second round of post-coronavirus financial programs.

Recently, a group of legislators wrote that government spending during the coronavirus must stop because it is closing in on \$10 trillion. They noted that, adjusted for inflation, \$10 trillion is more money than was spent on the Revolutionary War, Civil War, World War I, and WWII combined.

In brief, the two major powers competing for world economic leadership are now each facing a harsh economic situation. It is in that context that the changes should be examined.

■ A Product of Wargames

FD 2030 is the product of a series of wargames. Nothing has been reported about the wargames themselves, but much has been reported about changes to be made in the Fleet Marine Force (FMF), a force that purportedly will still be able to serve as the nation's rapid reaction "force in readiness," even though it is organized, trained and equipped to serve as a "commando-like" sea control force.

In addition to losing its tanks, the FMF's infantry loses an entire regiment plus 200 Marines from each of the 21 remaining infantry battalions. The rifle companies gain many more Staff NCOs, (common in commando structures); company weapons platoons will no longer exist; the machine guns and Mk-19 grenade launchers will be unmanned but located in an armory for use at the battalion commander's discretion; and the rifle company's 60mm mortars will become a thing of the past. Cannon artillery is reduced to only 5 batteries in the entire FMF. Cannons will be replaced by rockets, missiles, and drones.

Considering the organizational changes and the mission requiring stealth, the "Littoral Regiments" are commando forces or, in American terms, "Special Operations Forces" organized, equipped and trained to perform a special operations stealth mission.

■ Marine Aviation

Published descriptions of the FD 2030 mission do not include Marine aviation.

An official FD 2030 document of March 2020 does state that there will be "... some carefully constrained tests of the ability of the F-35B (a VSTOL aircraft) to operate from austere, undeveloped landing sites." As stealth aircraft, the F-35B and C models are the ideal weapons systems to close within missile range of warships and successfully attack. Unfortunately, the F-35B needs a reinforced pad for vertical landings and a short runway for takeoff. The F-35C, designed for aircraft carrier operations, needs a minimum 4000-foot runway for take-offs and a mid-runway arresting gear for landings. Use of either F-35 model in a FD 2030 deployment role seems impractical.

The Marine Corps, as the nation's 911 force in readiness, is prepared to deploy lethal forces on short notice. These contingencies, not war with China, are the most common types of emergency deployments. For decades, the Marine Corps' response has been provided by Marine Air Ground Task Forces (MAGTF's) of the size and composition required. One of the prices of FD 2030 is the loss of the MAGTF capability. An organization structured, trained and equipped to conduct commando stealth operations cannot be converted into a MAGTF warfighting machine on short notice.

The FD 2030's 26 percent Marine aviation loss includes losses of all types of aircraft except KC-130 refuelers, a much-needed aircraft even today. Marine aviation is the MAGTF's Close Air Support hammer and source of ground force battlefield mobility. FD 2030 Marine



U.S. Marines conduct a simulated amphibious assault in exercise Talisman Sabre 19 in Bowen, Australia, July 22, 2019. (Photo: U.S. Indo-Pacific Command/Lance Cpl. Tanner Lambert)

aviation lacks the pile driver punch and mobility assets required by MAGTF's. For example, current plans call for the 18 active duty Marine F-35B squadrons to each have 16 aircraft. FD2030 reduces that number to 10 aircraft per squadron – a total planned decrease from 288 aircraft to 180 aircraft.

The F-35B and C model stealth aircraft are expensive, ideal anti-ship weapons systems. They are the best and most efficient weapons system in the Corps today. Both can perform the FD 2030 mission without having 50-100 man detachments deployed to China Sea islands. The C model planes operate from carriers. The challenge would be to find safe bases and tanker support for the B models or F-35C's not carrier-deployed. There is no need to deploy small groups of Marines to China Sea islands.

■ Conclusion

Writing in *Foreign Policy*, Tanner

Greer posited three questions for the developers of FD 2030:

- Was this plan developed in consultation with America's Indo-Pacific allies or with the other branches of the U.S. military, all of whose cooperation is needed for its success?
- Is the Marine Corps optimizing itself for the range of possible conflicts with China, or just the one it most wants to fight?
- What if the Marine Corps's predictions for the future are wrong?

We suspect none of those were asked or answered. The FD 2030 mission is actually a special operations mission. The nation has a Special Operations Command. It does not need the overhead attendant to a second Special Operations Command; Money counts.

The FD 2030 force is not organized, trained or equipped to perform the most likely types of force in readiness combat missions. These require MAGTF

capabilities not available in light of the required reorganizing, re-equipping and training involved in converting from a defensive to offensive role.

America is a maritime nation and in order to protect her maritime interests, must have the ability to project power from the sea. Sadly, that power has been permitted to atrophy. A concerted Navy-Marine Corps effort of value to the nation would be the modernizing of amphibious warfare doctrine, equipment, shipping and training. These are necessary actions that must be taken, even though money counts.

Otherwise, we are not dealing with a new beginning of the Fleet Marine Force. We are likely seeing the beginning of the end of the United States Marine Corps. First, Marine Air: then the rest.

Maj. Gen. MICHAEL SULLIVAN, USMC (Ret.) and Maj. Gen. JARVIS D. LYNCH, JR., USMC (Ret.)

U.S. Army: Long-Term Implications of COVID-19

by **STEVEN METZ**

A year ago, the U.S. Army was busy retooling from counterinsurgency to long term competition with China and Russia. Its focus was on what it called “multi-domain operations” particularly in the Indo-Pacific region, and on modernizing to fight large conventional operations. Then came the COVID-19 pandemic. For the U.S. Army – as for every element of American society and government – much changed in a matter of months.

The Army’s initial response was exactly as it should have been. Using mostly the National Guard, the Army rushed to help overwhelmed civilian authorities, constructing emergency field hospitals and, in some states, helping operate elderly care homes and prisons. Once civilian authorities began to get a handle on the medical crisis, they needed less direct support from the military. Then – again exactly as it should – the Army began thinking about what the COVID-19 pandemic might mean for it over the long term. This has only just begun – no one knows the precise extent or direction of change that the pandemic will produce.

■ “Bump in the Road”

Most security experts and Department of Defense officials expect the pandemic to represent a temporary “bump in the road” rather than the beginning of a revolution. Thinkers in this camp believe that once a vaccine appears and the pandemic ends, the United States and its Army must return to the business at hand: managing the competition with Russia and especially China. China will be the focus of American strategy for years to come so the Army must be optimized to deter and defeat it. This

is a big job. As a recent report from the U.S. Army War College Strategic Studies Institute put it, “the United States is out of position for multi-domain competition and multi-domain conflict” so the Army’s priority should be adopting four “transformational roles” to address China’s regional and global assertiveness.

The COVID-19 pandemic is likely to lead to diminished Army involvement in support to security partners, particularly if it causes diminished or collapsed order in the poorer parts of the world.

For “bump in the road” thinkers, the goal is moving past the temporary distraction created by the pandemic and transcending or offsetting its effects, particularly on defense spending. The worst that many analysts consider likely is a return to the “austere” sequestration budgets seen at the end of the Obama administration. This might require modest Army force reductions and cuts or delays in modernization plans, but it would be an adjustment, not a revolutionary transformation. The Army’s strategic role and its basic organization would remain the same.

■ The Revolutionary Transformation

There is, though, a very different alternative. Rather than a temporary bump in the road, the COVID-19 pandemic may be a catalyst for revolutionary change in the global security system and in American security strategy, amplifying and speeding macro-level shifts that had already begun. It is

possible, as British journalist John Gray predicted, that:

The era of peak globalisation is over. An economic system that relied on worldwide production and long supply chains is morphing into one that will be less interconnected. A way of

life driven by unceasing mobility is shuddering to a stop. Our lives are going to be more physically constrained and more virtual than they were. A more fragmented world is coming into being that in some ways may be more resilient.

The result, according to American science journalist Laurie Garrett, “could be a dramatic new stage in global capitalism, in which supply chains are brought closer to home and filled with redundancies to protect against future disruption.” Some regions and areas will benefit, using robotics, artificial intelligence, and additive manufacturing to partially delink from the globalized economy. This would give advanced regions the option to disengage from poorer ones, relying on technology to replace the low-cost labor that previously came from abroad. In the broad sense nations could practice the strategic equivalent of “social distancing.”

This would have immense effects

on American strategy, undercutting the longstanding assumption that the United States must be concerned with security everywhere because in an interconnected world, instability and insecurity in even faraway places resonates in the homeland. Jobs in Indiana, the old argument went, depend on stability in the Middle East. For decades, this thinking justified an expansive strategy and an expeditionary military, including an Army capable of global power projection. But if the pandemic leads to partial deglobalization as Gray and others predict, the United States could resist the urge to attempt managing stability far from the homeland. And if promoting security around the world was not a vital U.S. interest, it would be hard to justify an increasingly expensive, expeditionary military. Hence at the same time that the United States faces immense costs from pandemic recovery and the need to build national resiliency against future disasters, the strategic rationale for keeping a powerful expeditionary military would fade.

Some defense experts might contend that if the United States de-emphasized global power projection, Russia and China would simply step in as America disengaged from parts of the world and become hegemonic. This seems improbable. If anything, deglobalization will affect China, with its export focused economy, impending demographic challenges caused by decades of a “one child” policy, and mounting climate change issues, more than the United States. In all likelihood Chinese and Russian security strategy also will change dramatically in the coming decade.

Deglobalization is only one component of the revolutionary change that COVID-19 is unleashing. The pandemic also may reshape the global security system by causing widespread state collapse as weak governments are hammered by the immediate cost of recovery from the pandemic, the loss of remittances and trade as the world undergoes partial deglobalization, the localization of manufacturing, the loss of foreign assistance

as the richer nations struggle to pay for pandemic recovery, and the mounting challenge of climate change. Interminable conflicts and humanitarian disasters like Syria or Yemen may become tragically common. But as the United States struggles with the costs of the COVID-19 crisis and the post-pandemic challenge of building national resilience, it would be unlikely to intervene in collapsed states, at least outside the Western Hemisphere.

All of this may speed an ongoing – and historic – shift in the way that Americans think about security. Traditionally,

and non-adversary threats. From this perspective, homeland security rather than security abroad – power projection and expeditionary military capability – would be the priority in resource allocation, national resiliency more important than defeating or deterring external enemies. The military would be an important component of an integrated, homeland-focused security organization but more in a supporting role, its value assessed by its contribution to national resiliency rather than the ability to defeat enemies on the battlefield.

Today it makes sense for the Army to plan for some budget and force structure cuts, and to continue to focus on multi-domain operations, particularly in the Indo-Pacific regions.

national security meant defense against identifiable adversaries, mostly foreign. Enemies had to be contained, deterred and, if necessary, defeated. This was delegated to security professionals whether civilian or military. Most of the public was only involved in security by paying taxes and electing officials who supported it. This conceptualization reflected the conditions of the 20th century but now is dated. Today’s security environment is characterized by a blurred distinction between foreign and domestic threats; informational saturation which fuels partisanship and makes the United States vulnerable to manipulation; the ability of nonstate adversaries to attack the United States; the “weaponization of everything”; and the growing salience of non-adversary threats like pandemics, environmental disasters, climate change, and economic crises.

Even before COVID-19, the United States was slowly moving toward a “triangular” conceptualization of security simultaneously focused on identifiable adversaries, clandestine adversaries,

The COVID-19 pandemic did not create these trends but may accelerate and amplify them, pushing the United States toward a revolutionary transformation in the way it thinks about and organizes for security.

■ *Changes for the U.S. Army*

Clearly the “bump in the road” scenario would mean business as usual for the Army while the “revolutionary transformation” one would require a wholesale redesign. The economic costs of pandemic recovery and the ensuing shift to holistic, homeland-focused security with a robust public health component will cut deeply into Army acquisitions and modernization. This will be particularly true of systems designed for warfighting against adversary armed forces. Rather than being optimized to fight identifiable enemies, the “revolutionary transformation” Army would need to fight identifiable enemies, confront clandestine adversaries, and support civilian authorities as they build national resiliency against non-adversary threats – all at the same time.



U.S. Army paratroopers assigned to 2nd Battalion, 503rd Infantry Regiment, 173rd Airborne Brigade prepare to board an aircraft prior to an airborne operation in Aviano Air Base, Italy, June 24, 2020. (Photo: U.S. Army / Spc. Ryan Lucas)

While it is impossible to predict how much the Army would shrink in the revolutionary transformation” scenario, there would be significant force structure cuts. Given the vital role of the National Guard in support of civil authorities, the cuts are likely to fall heavily on the active component. Eventually the U.S. Army might be composed mostly of the National Guard. As the Army’s priority shifted from war-fighting to support and participation in an integrated, homeland-focused security system and organization, support to civil authorities would increase in importance. The possibility – even probability – of future pandemics will increase the emphasis on networked autonomous operations in the Army. The COVID-19 pandemic is likely to diminish Army involvement in working directly with security partners, shifting toward virtual training and advice.

The “bump in the road” and the “revolutionary transformation”

scenarios are the outer boundaries of the effects that the COVID-19 pandemic may have on the Army. In reality the Army’s future probably lies somewhere in between the two. But America’s national leaders, rather than the Army itself, will determine the service’s future. National leaders must decide whether the COVID-19 pandemic requires thinking differently about security or simply is a temporary distraction from the normal state of affairs. Is the future of American security deterring and possibly defeating foreign adversaries the way it has been for more than a century, or is it building holistic national resiliency against the triad of challenges? How this question is answered will determine not only what the future U.S. Army will look but also what, in the broadest sense, it will do to promote national security.

Today it makes sense for the Army to plan for some budget and force structure cuts, and to continue to focus on

multi-domain operations, particularly in the Indo-Pacific regions. But it also should be thinking about revolutionary transformation, assessing how it would remain effective if ordered to take significant force cuts and play a supporting role in the building of national resiliency rather than a leading role in defeating foreign enemies.

At this point it may be too soon to begin revolutionary transformation but the Army should undertake a wide ranging program of analysis and research to develop some idea of how to do it if required. The Army has undertaken revolutionary change before, most recently in the 1940s. Now it may have to do so again but this time it will be a very different sort of revolution.

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The National Guard: Protect Those Protecting Us

by Brig. Gen. J. ROY ROBINSON, USA (RET.)

Where would many Americans be this year without their National Guard? Certainly in even more dire straits. Guard soldiers and airmen have helped feed millions nationwide who suddenly found themselves out of work due to the COVID-19 outbreak.

They've also tested hundreds of thousands for the virus, disinfected many nursing homes, and kept hospitals nationwide supplied with personal protective equipment. Guardsmen also helped restore a measure of order in American cities when many protests spiraled out of control.

At one point in early June, nearly 100,000 Guard soldiers and airmen were on duty across every state, Guam, Puerto Rico, the U.S. Virgin Islands, and the District of Columbia. That's almost double the number that responded to Hurricane Katrina in 2005.

Most Americans know this. The Guard's response to these trying times has been one of the few good news stories lately. Citizen-soldiers and airmen came out to help when other citizens heeded the advice to stay in.

Many may not know that the Guard also continued to provide thousands of soldiers and airmen to missions overseas in places including Afghanistan, Kuwait and Syria. The days of the Guard as strictly a strategic reserve are history. In any future fight, the Guard will be among the first in.

What most probably don't know is that while this force has become indispensable, it struggles with something as essential as medical coverage. Our nation offers health care to

active-component troops, but not routinely to members of the National Guard unless they are serving overseas.

A provision in law does provide coverage to Guardsmen mobilized for duty on U.S. soil, but only if they are on federal orders in increments of more than 30 days. This gave peace of mind to some Guardsmen on the front lines of the worst public health crisis in more than a century. But many others didn't qualify. They were either in a different status or did not meet a rather arbitrary time requirement.

And none of them are covered after they leave COVID-19 duty. Our nation provides Guardsmen with six months of transitional coverage after an overseas mission to cover any lingering effects, but not one day after helping fight what has turned out to be a very tricky virus at home.

I have one word for this: unconscionable.

But such coverage is not required by law, so the Pentagon won't provide it.

Congress recognizes the need to fix this. There are bills in both the House and Senate to provide Guardsmen with six months of transitional healthcare after a domestic mission. The legislation will likely pass, but not soon enough to help those now heading back to their families.

A simple solution would be to provide Guard soldiers and airmen with no-cost medical coverage for the duration of their service in uniform, and not just during some missions. Increased medical readiness and better recruiting and retention would likely more than cover the costs.

Unfortunately, Guardsmen have grown accustomed to something less than the full support of our nation. Do you think Army and Air National Guard units deploy overseas, often to harm's way, with the best equipment our nation has to offer? Some do, but many do not.

The 278th Armed Cavalry Regiment from Tennessee recently spent time in Poland as a tripwire, the first line of deterrence and defense against Russian adventurism. They did so using old, analog tanks that are no longer advanced enough for active-component Army units.

This example is hardly an exception. Most Air National Guard pilots are younger than the planes they fly. The same goes for many Army National Guard aviators and their helicopters. And ditto for many of the Guardsmen who roll up to a disaster scene in a Humvee. Good thing that Guard mechanics are so good. They have to be to keep this old equipment in the fight.

It's time for our nation to treat the National Guard as the go-to force that it has become and the nation requires. Active-component members have front-line equipment and benefits. Guard soldiers and airmen deserve and need the same.

If not now, when? Guardsmen have proven they have America's back. It's time for all of us to have theirs.

Brig. Gen. J. ROY ROBINSON, USA (Ret.) is President of the National Guard Association of the United States in Washington, D.C.

Ruled or Governed?

review by SHOSHANA BRYEN

Are Americans ruled or governed? Before you get to the excellent *Young Patriots* by Charles Cerami (published in 2005 and still definitely a book for 2020), read the fictional, but very real, *A Thousand Splendid Suns* (2007) by Khalid Hosseini. Readers follow the (mis)fortunes of two Afghan women from the time of King Zahir Shah through his overthrow by the communist Doud Khan through the bloody Soviet occupation through the bloody mujahidin (holy warriors) through the bloody Taliban and into the Americans. Always ruled, never governed. Each time the government changed, some people were sure it would be better, and others were sure not. The “sure nots” were mostly correct; but no one ever asked their or anyone else’s opinion. When the Americans came, things looked pretty good for the people. For a while. Then the war started again, and the Americans mostly left, and the people of Afghanistan are pawns again – or always were.

Therein lies the difference between ruled and governed.

Ruled is when someone tells you what to do because they think they know better or God tells them or they have more money or the right color skin or more weapons or less compunction about stealing, beating, or killing people who don’t conform. [Slaves of any color in any country in any historical or present-day context; Jews; Uighurs; Tutsis; Armenians; women and others have experience with this.] Governed is when people are periodically vested by the voters with the authority to represent the needs and wishes of their constituents in the laws they pass. Governed *well* is when the laws they pass protect the people they serve – including from

the government. The operative words are “represent” and “serve.”

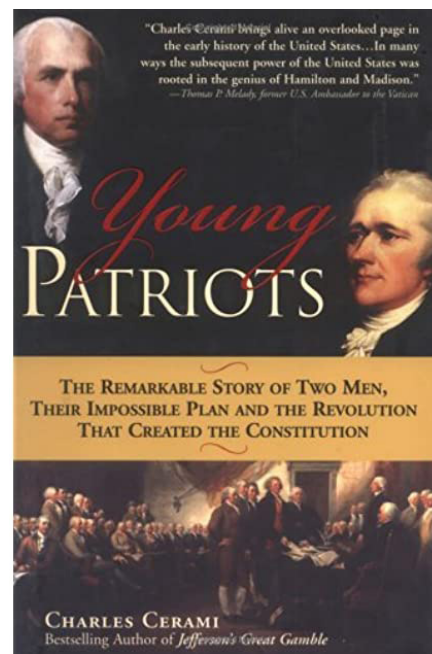
The great genius of the United States is that the Founders believed two things: that governing was better than ruling and that the nature of the American people and their government would evolve toward better. They did not believe in perfection.

The question of who knows best what others should do is the setup for *Young Patriots*, the story of James Madison, Alexander Hamilton, and the creation of the United States Constitution. Benjamin Franklin said as he signed the document, “I expect no better and I am not sure it is not the best.” Never missing an opportunity to tweak the pompous, Franklin told the delegates to “overlook their own infallibility.”

Cerami, an economist and former editor at Kiplinger Washington Publications, was the editor of *A Marshall Plan for the 1990s: An International Roundtable on World Economic Development*. But his avocation, it seems, and his great love is American history. His books include *Benjamin Banneker: Surveyor, Astronomer, Publisher, Patriot*; *Jefferson’s Great Gamble: The Remarkable Story of Jefferson, Napoleon, and the Men Behind the Louisiana Purchase*, and *Dinner at Mr. Jefferson’s: Three Men, Five Great Wines, and the Evening that Changed America*.

Although the book is nominally about Madison and Hamilton, Cerami creates a full picture of a great many delegates with their foibles, fears, and brilliance, as well as compelling and thorough treatment of the issues with which they struggled.

The Declaration of Independence was signed in 1776 and the war with Britain officially ended in 1783. By 1787,



Young Patriots:
The Remarkable Story of Two
Men, Their Impossible Plan and
the Revolution That Created the
Constitution
by Charles Cerami

the Articles of Confederation were failing to hold the young country together. States took on the attributes of countries,

more important people.

James Madison – the brainy but less-attractive hero of the book, who

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including being individually courted by England and France, and no one was paying taxes owed to Congress. Shay's Rebellion made some states question the ability of other states to manage their business – including slavery. And even the determination that the new country would be a republic wasn't certain. A British observer noted:

They can never be united into one compact empire under any species of government whatever; a disunited people till the end of time, suspicious and distrustful of each other, they will be divided and subdivided into little commonwealths or principalities, according to natural boundaries.

And he was a friend! He wrote as well:

As to the future grandeur of America, and its being a rising empire under one hand, whether republican or monarchical, is one of the idlest [Ed. in the sense of impractical] and most visionary notions that was ever conceived even by writers of romance.

Was it? Is it? Cerami takes the reader deep into the minds of the delegates – those you have heard of and those whose names are less familiar. Gouverneur Morris, Robert Morris, William Livingston, Charles Cottswoth Pinkney, John Routledge, William Samuel Johnson, and Roger Sherman share space with better known, but not necessarily

far outpaces the handsome, Broadway musical-worthy Alexander Hamilton – was a revolutionary. If the Articles of Confederation aren't working, get rid of them. Oust the government! Power to the People!

Thomas Jefferson believed in power to more of the people – promoting universal education and the vote for people other than landowners. To those who worried that creating more voters risked mob rule, Madison responded that the more people who became Americans and were educated and could vote, the less likely a ruler could claim despotic

the seat to an heir. George Washington – who in any event, had no heir – deeply disagreed, but he was already irritated with people who didn't agree with him and didn't actually plan on attending the Convention. He wrote to Henry Knox, "It is not my business to embark again on a sea of troubles; nor do I suppose I would not have much influence with my countrymen, who know my sentiments and have neglected them." Happily, he was prevailed upon.

Cerami delves deeply into the arguments about representation and the Electoral College, differentiating the House of Representatives from the Senate, and both from the Executive and the Judiciary, as well as arguments about the power of the national government to override decisions and laws made in the States. And the size and shape of the capital city – should one be needed. Jefferson's reaction to the draft (he was Ambassador to France and thus not present), The Federalist Papers, European Romanticism, and "The Truth about Rhode Island" get chapters of their own. Some of these put you back in high school history class, albeit with an excellent teacher.

If the Articles of Confederation aren't working, get rid of them. Oust the government! Power to the People!

powers. Madison and Jefferson feared despotism above all. Interestingly, while the question of slaves and slavery was very much on the table, the question of women voting was never considered.

Hamilton was an elitist or maybe actually a royalist. He agreed that the Articles of Confederation weren't working, and that a stronger central government was necessary, particularly for fiscal reasons. But he also believed in an upper crust ruling the common man. In fact, Hamilton agreed to a president, but thought a life tenure might be good – or even that a president could be able to pass

The discussions about slavery will satisfy no one. Every "compromise" was made on the (literal) backs of African and Caribbean people even if no one defended slavery as an institution. George Mason didn't sign the Constitution out of his opposition to compromises on slavery. But the prescient Madison foresaw the horror of the Civil War to come. "Every master of a slave is born a petty tyrant. They bring the judgment of heaven on a country. As nations cannot be rewarded or punished in the next world, they must be in this." He believed that if the southern

states refused to join the union, their new, independent country would be a slave-based country forever. Only with a union could the end of slavery even be imagined. Oddly, South Carolina's Charles Pinckney agreed, as did sev-

Let us look to our national character and to things beyond the present period. No morn ever dawned more favorably than ours did; and no day was ever more clouded than the present! Wisdom and good examples are

People began to assemble for the purpose of debating in Boston, New York, Richmond, Baltimore, and even in the smaller towns – too loudly and raucously in many cases – but talking or shouting, not fighting. This was heartening. It appeared at first that people were showing enough maturity to realize that this document, after all, must be supported or attacked only after studying what it said, not in blind anger.

Interestingly, while the question of slaves and slavery was very much on the table, the question of women voting was never considered.

eral other southern delegates. And so, the south stayed long enough for abolitionists and anti-secessionists to build enough support to go to war in 1861.

As I said, the discussion will satisfy no one – but this book is for understanding the Founders, so understanding the arguments matters greatly. And it is worth considering the seriousness with which the delegates took the possibility of losing the country they had only so recently established. Washington, as he often did, captured a moment:

necessary at this time to rescue the political machine from the impending storm...Without some alteration... we are fast verging to anarchy and confusion!"

In Philadelphia in that sweltering summer of 1787, the Founders did, indeed, create a Constitution to “rescue the political machine.” But that was only step one. The ratification of the document was left to the States and the people. And “We the People” rose to the occasion.

Americans today would do well to read *Young Patriots* and decide to study the issues that confront us in the 21st century with “talking or shouting, not fighting” and “not in blind anger.” Cerami might well have added “without CNN, or *The New York Times*, et. al.,” which in our day have taken on the role of ruler – predigesting and telling viewers and readers what those august bodies believe the people need to know. And with minimal input from those – politicians or media members – who have forgotten how to “overlook their own infallibility.”

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■ *A Final Thought ...*

The Wall Crumbles

History (high school students to the contrary) is not a series of dates; they are points in a process. A country, politician, or terrorist can block history for a time, but ultimately, perceived national interest and threats to those interests will undermine a roadblock that has lost its relevance. President Donald Trump's policy successes in the Middle East consist primarily of opening artificial floodgates and allowing the passage of political currents already moving.

That is not a small thing.

The establishment of Israel was accompanied by a unanimous wall of rejection and military action by the Arab States, but it lasted only until 1977, when Egypt found its national requirements in conflict with the wall. Another crack appeared when Jordan, made peace with Israel in 1994. For a time, the Arab states postured as the guardians of the Palestinians, but while the Arabs were posturing, the Iranian Revolution of 1979 was having an effect on the region, i.e., on their national interests.

The destructive power of Shiite Iran has crossed the Arabian Peninsula, decimated Iraq, Syria, and Lebanon, and poured arms and money even into Sunni Hamas. The Gulf States need the Abraham Accord as much as or more than Israel does – but all of them need it more than they need to cling to outmoded models of politics. Over the past several years, quiet but meaningful exchanges have taken place between Israel and several Arab countries and 72 years of rejection are crumbling.

There was predictable moaning from Palestinian leadership and American foreign policy “experts” decrying the loss of their beloved “two state solution.” A major “land for peace” advocate wrote, the Middle East just doesn’t matter as much any longer. “American leadership and exceptionalism cannot fix a broken Middle East or play a major role in leading it to a better future.” Shot down and out of business, his response is, “Meh.”

He is wrong.

The Abraham Accord is a major breakthrough, aided by American leadership and exceptionalism.

As Arab states put their national priorities first, wider swaths of cooperative activity are emerging. One has only to see the Abu Dhabi Department of Culture and Tourism mandating that “all hotel establishments are advised to include Kosher food options...” There are terrific videos of children in the UAE singing and dancing with an Israeli flag on the wall – contrast with Palestinian children taught by Hamas that Israel has to be destroyed. El Al can overfly Saudi Arabia and Bahrain, and *The Saudi Gazette* carried a column entitled, “When Will the Palestinian Man Wake Up?”

Not yet apparently. The Palestinian Authority demanded an Arab League vote to condemn the UAE.

The Arab League declined, and the wall further crumbles.

– Shoshana Bryen

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