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*in*FOCUS

QUARTERLY

How We Fight



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Featuring an Interview with Representative **DON BACON** (R-NE)

LETTER FROM THE PUBLISHER

For history buffs and movie buffs, the 1942-45 Frank Capra series “Why We Fight” is a masterpiece. It was part of the American government effort to explain – first to the troops and then to the public at large – why the generally isolationist United States was engaging in wars in Europe and Asia with allies that included the communist Soviet Union. Capra took bits and pieces of information that people understood from newsreels and newspapers (no Facebook or Twitter) and created a context for the war. Since 2001, the United States has found itself in a different kind of war while continuing to face traditional threats. This issue of *inFOCUS* Quarterly examines not the “why” of American defense, but the “how.” And how to do it better.

We interview a retired U.S. Air Force Brigadier General and a Congressman. They are the same person. Rep. Don Bacon (R-NE) brings his military insights to bear on his role as a member of the House Armed Services Committee.

The broad strokes of national defense strategy, asymmetric threats and the continuing terror war are addressed by Mackenzie Eaglin, Lani Kass, Clifford May and David Adesnik. New threats

– Chinese cyber spying and the uses of artificial intelligence – are the purview of Stephen Bryen and Yisuo Tseng. There are familiar issues as well. Seth Cropsey writes on operations of the U.S. Navy in the Persian Gulf and Red Sea. James Durso suggests that 17 years in Afghanistan may be enough and proposes a way out. There is our favorite familiar theme as well, as Jonathan Honigman makes the case for the financial and national security benefits provided to us by our friend and ally, Israel.

Every war must end. JPC Senior Director Shoshana Bryen reviews Dr. Fred Iklé’s book of the same name, offering a sobering picture of what happens when countries focus overly on the “why” and not enough on the “how” of warfare.

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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President Trump's Counter-Terrorism Strategy

by **CLIFFORD D. MAY** and **DAVID ADESNIK**

“We remain a nation at war.” President Trump’s new National Strategy for Counterterrorism, released in early October, begins with that simple statement of fact. Despite the West’s victories in the several major wars of the 20th century, the 21st century is not an age of peace. It is yet another age of conflict.

We don’t like that. It’s more comforting to believe, as President Obama asserted on numerous occasions, that “the tide of war is receding.”

For the 44th president, that phrase became both a mantra and an *idée fixe* following the May 2, 2011 midnight raid by U.S. Navy SEALs on Osama bin Laden’s compound in Abbottabad, Pakistan.

Obama initially used the phrase on June 23, 2011, in his prime-time address from the East Room of the White House, announcing the first phase of U.S. troops’ withdrawal from Afghanistan.

That summer, he released his National Strategy for Counterterrorism, which strongly suggested that the end of what the George W. Bush administration had called the Global War On Terror was imminent. In his introduction to the main text, he wrote: “Today, we can say with growing confidence – and with certainty about the outcome – that we have put al-Qaeda on the path to defeat.”

In September, he told the U.N. General Assembly: “Let there be no doubt, the tide of war is receding.” The phrase also cropped up in Obama’s next State of the Union address, and on half a dozen other occasions.

The evidence for this optimistic analysis was less than conclusive. In

addition to the elimination of bin Laden, there was the Arab Spring, widely presumed to herald an anti-authoritarian and pro-democracy turning point in the Middle East. A patina of stability in Iraq provided justification for Obama’s decision to pull the U.S. military out of that troubled land. The Taliban appeared to be on the defensive in Afghanistan.

At that point, the bloodbath in Syria had barely begun. A year would pass before the murder of a U.S. ambassador in Benghazi highlighted the chaos in Libya. The Islamic State had not yet risen from the ashes of al-Qaeda in Iraq, which had been decimated by the “surge” President Bush ordered with Gen. David Petraeus in command.

And when the Islamic State did arise, early in 2014, Obama dismissed it as a “JV” team. The following year, just before IS terrorists carried out a massacre in Paris, he insisted that, “we have contained them.”

In the early days of his second term,

Nor do most wars simply grind to a halt. Instead, they are won or lost. “Conflict resolution” is a fine notion but it often conceals a hiatus during which at least one side prepares for the next round of conflict (cf. World War I and World War II). As for democracy, it demands vigilance when confronted with anti-democratic forces. Of which there are many.

■ *Fighting Radical Islamists*

In World War II America defeated racial supremacists. In the Cold War we defeated class supremacists. In the current war, the Long War, as it makes sense to call it, we face religious supremacists whose theology rules out peaceful co-existence. The Obama administration never grasped this stark reality.

The Trump administration appears to. At a White House briefing, National Security Advisor John Bolton told reporters the principal difference between the new strategy and its predecessor is that the former “recognize[s]

...if history advises anything it’s that wars seldom end by fiat...they are won or lost.

Obama sought to formalize the end of the war by seeking to repeal the Authorization for Use of Military Force (AUMF) that Congress passed in 2001. “This war, like all wars, must end,” President Obama told his audience at the National Defense University. “That’s what history advises. That’s what our democracy demands.”

Actually, if history advises anything it’s that wars seldom end by fiat.

that there’s a terrorist ideology that we’re confronting.” “Without recognizing that we’re in an ideological struggle,” Bolton added, “we can’t properly address the terrorist threat.”

To be fair, the previous administration favored a “war of ideas.” Indeed, it asserted that it was prevailing in this theater.

“The relevance of al-Qaeda and its ideology has been further diminished,”



President Trump addresses the 2018 session of the U.N. General Assembly in New York. (Photo: Joyce N. Boghosian/White House)

Obama wrote in his introduction to the 2011 document. The Arab Spring, he added, had discredited the terrorists' ideology by showing how, "In just a few short months, [non-violent] movements achieved far more political change than al-Qaeda's years of violence."

In fact, as is now apparent, under Ayman al-Zawahiri, successor to bin Laden, al-Qaeda merely evolved. And it has continued to grow. At the same time, tens of thousands of young men, and more than a few young women, left behind relatively safe and comfortable lives in Europe, the Gulf States, and North Africa to answer the Islamic State's call to establish a new caliphate in Syria and Iraq. They did this in the belief that they were fulfilling their religious duty.

The 34-page strategy issued by the Trump administration refers to "radical Islamist terrorist groups," a phrase President Obama avoided out of fear it would offend Muslims and validate the terrorists' claim to represent authentic and original Islam.

President Obama was misguided. Muslims are not fools. They know that from Asia to the Middle East to Africa

to the Balkans to Michigan, Islam is interpreted and practiced in many different ways.

Islam is not a monolith. However, a fanatic minority of Sunni Muslims are determined to make it one – determined to eliminate what they see as heretical practices and interpretations of Islamic scripture. Day after day, they slaughter Muslims who disobey or even disagree. The Arabic word for such a theological bully: *takfiri*. We can and should ask Muslims to stand up to them. Indeed, we have an obligation to support those who do.

In the briefing at which he introduced the new strategy, Amb. Bolton noted that, "King Abdullah of Jordan has frequently described the terrorist threat as a civil war within Islam."

Mr. Trump's new strategy distinguishes Islam, the faith of more than a billion people around the world, from Islamism, an ideology committed to spreading a supremacist, intolerant and bellicose version of Islam and of Islamic law. Islamists seek to re-establish the dominance Islam enjoyed throughout much of the world for nearly a thousand years.

Not all Islamists utilize violence

– which is not the same as saying they reject violence. A subset of Islamists, however, may be described as *jihadists*. They believe, as a matter of faith, that the path to the future must be cleared by the sword, by waging a holy war to defeat and eliminate infidels, apostates, and heretics. Or, as al-Qaeda leader Ayman al-Zawahiri phrased it a message timed to coincide with the most recent anniversary of the 9/11/01 attacks, against "the major international criminals – America being the foremost."

Iran's rulers, though Shiite, not Sunni, are indisputably jihadists. The Trump strategy characterizes the Islamic Republic as "the most prominent state sponsor of terrorism, through its global network of operatives and its ongoing support to an array of terrorist groups."

The relationship between radical Islamists of the Sunni and Shiite varieties is complicated. Sunni *takfir*is view Shiites as their enemies but they are quite willing to deal with devils when doing so seems useful. By the same token, Shiite jihadists hate *takfir*is – whom they accuse of being an American creation – but are more ecumenical about Sunnis in general.

In his White House briefing, Amb. Bolton remarked that the theocrats in Tehran have been “the world’s central banker of international terrorism since 1979,” adding that “Iran-sponsored terrorist groups such as Lebanese Hezbollah, Hamas, and Palestinian Islamic Jihad continue to pose a threat to the United States and our interests.”

It is worth noting that Hamas and Palestinian Islamic Jihad are both Sunni radical organizations, which are glad to work hand-in-glove with the Shiites in Tehran. Also, Bolton was not waxing rhetorical when he described the Iranian regime as the central banker of international terrorism. In May, the U.S. Treasury imposed sanctions on the governor of the Central Bank of Iran for his personal role in helping to fund Hezbollah.

■ War by Other Means

Successfully fighting wars requires staying on a war footing for as long as necessary. It means killing enemies. Amb. Bolton said the president also intends to place “an increased emphasis on non-kinetic means.” The document candidly acknowledges, however, that, “we have not developed a prevention architecture to thwart terrorist radicalization and recruitment.”

In general, the Trump administration has been dismissive of the various

them, that allow them to regenerate, and that permit them to adapt.”

In other words, the use of economic weapons will be integral to depriving both Iran’s rulers and non-state terrorist groups of the resources they need to fight effectively over the long run. The U.S. Treasury has developed mechanisms to disrupt terror financing.

The Trump administration has indicated it will exert far greater financial pressure on Iran’s rulers. Obama started lifting that pressure in exchange for an interim nuclear weapons agreement in 2013, which the parties finalized two years later. Pressure also will be increased on Iranian-backed Hezbollah. Obama let Hezbollah get up from the mat when he dismantled Project Cassandra, the formidable interagency task force dedicated to disrupting the globe-spanning criminal enterprise that Hezbollah runs to finance its operations.

Terrorist funding also continues to come from Middle Eastern petroleum—the most important source of income for Tehran. The administration would be well-advised to implement policies to encourage transportation fuel diversification which can lead to increased U.S. energy security, if not independence. The day before the White House released Trump’s new strategy, the price of Brent crude hit a four-year high of more than

counter-terrorist strategy is to find partners willing and capable enough to share the burden. The administration would like America’s allies to be better partners, to shoulder more responsibilities. “America First does not mean America alone,” the new strategy notes.

Burden-sharing has been a perennial objective, dating back to George W. Bush’s inaugural National Strategy for Combating Terrorism, released shortly before the invasion of Iraq in 2003. As the history of NATO suggests, the search for an equitable division of labor never ends. Thankfully, in the struggle against the Islamic State, the U.S. partnership with Syrian Kurdish forces has proven to be extremely beneficial, first under Obama and then under Trump.

Other notable components of the Trump strategy include continuing to detain unlawful combatants at Guantanamo (once on American soil they would be legally entitled to all the rights of American citizens), “building strong borders, strengthening security at all ports of entry into the United States, protecting its critical infrastructure, and facilitating preparedness.”

At this moment, the U.S. electrical grid is vulnerable to cyber weapons as well as an EMP attack (the detonation of a nuclear weapon high above the U.S. mainland). Prevention is preferable to cure but we should have a backup plan, one that makes it possible to restore electric power within days, not months.

President Trump’s new strategy is not the last word on counter-terrorism. Our enemies learn and adapt. So must we. Military strategists for millennia have been counseling that, “If you know the enemy and know yourself, you need not fear the result of a hundred battles.” With the tide of war rising rather than receding, that’s a conservative estimate of the number of battles that lie ahead.

CLIFFORD D. MAY is president of the Foundation for Defense of Democracies (FDD), where DAVID ADESNIK, Ph.D., is the Director of Research.

Obama let Hezbollah get up from the mat when he dismantled Project Cassandra, the formidable interagency task force...

programs initiated by its predecessor in the name of countering violent extremism, even those based on credible approaches to preventing radicalization. This is a situation that it might be helpful to reexamine.

Among the non-kinetic approaches, per the new strategy, is to “dismantle terrorists’ networks and sever the sources of strength and support that sustain

\$86 per barrel, with analysts forecasting \$100 per barrel in the near future.

The price has tumbled since then, thanks in part to Saudi Arabia’s efforts to maximize production. Yet a Saudi bailout may not always be a viable option, for both political and economic reasons.

Another means of ensuring the economic sustainability of the U.S.

Stop Repeating Past Mistakes

by MACKENZIE EAGLEN

It is time for a National Defense Strategy (NDS) that seeks to break the mold in honesty, clarity, conciseness, and fresh thinking. Since the end of the Cold War a quarter-century ago, NDS documents have repeatedly served as opportunities to redefine American force structure and interests globally. Unfortunately, the most recent generation has become increasingly unmoored from the strategic reality the country faces. Following the Cold War, the Pentagon's force-sizing construct has gradually become muddled and watered down at each iteration – from the aspirational objective of fighting two wars at once to the declinist “defeat-and-deny” approach – without enough substantive debate over the wisdom of the progressive abandonment of the two-war standard.

Even before debt reduction became a Washington priority in 2011, defense planning had become increasingly di-

vided from global strategic realities. American experiences in Iraq and Afghanistan exposed the limited utility of a force-sizing construct based on wars. The challenge in prosecuting two large stabilization and counterinsurgency campaigns during the past decade-and-a-half laid bare the discrepancy between

our stated defense capabilities and our actual strength. The wars that planners envisioned were not the ones the military was called upon to fight. A lack of definitional clarity and policy consensus about terms including “war,” “defeat,” “deny,” and even now “deter,” is far from the only problem with previous strategies. A combination of shrinking global posture, force reductions, overly optimistic predictions about the future, and a deteriorating security environment has led to a crisis of confidence in defense strategy-making.

The Budget Control Act of 2011 further compounded the difficulty of aligning resources with strategy through clear and thoughtful prioritization and adjudication between tradeoffs. The need to build a defense program to fit declining spending caps accelerated the reduction in relevance and scope of Pentagon strategy documents.

Even with declining force-sizing

plan campaigns, conduct global counterterrorism, reassure allies, and provide deterrence as operational tempos remain unwaveringly high.

Meanwhile various missions and efforts are being shortchanged, ignored, or dropped altogether as the supply of American military power is consistently outstripped by the demand for it. Some uniformed leaders would argue that the challenge is broader, and that policymakers expect military power to achieve outcomes beyond its scope. Both interpretations are correct, and each contributes to the lack of credibility in new strategic guidance in the minds of its consumers. This lack of faith in defense strategy-making and planning has contributed to America's global retreat and the worsening international security situation.

■ Realistic Defense Strategy

The writers of the newest strategy need to face some hard truths.

- Policymakers cannot wish away the need for a strong American presence in Asia, Europe, and the Middle East. This includes understanding America's commitments in the Middle East will not go away, get easier or eventually become a lesser burden on the military.

- Constructing budgets and then divining strategies, as the Budget Control Act has encouraged, is putting the cart before the horse.

- Pentagon reforms and efficiencies are noble goals and should become standard operating procedure to encourage good governance. But the belief that ongoing organizational changes will result in tens of billions in potential savings that can be reinvested elsewhere within

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forced from global strategic realities. American experiences in Iraq and Afghanistan exposed the limited utility of a force-sizing construct based on wars. The challenge in prosecuting two large stabilization and counterinsurgency campaigns during the past decade-and-a-half laid bare the discrepancy between

constructs, U.S. forces have largely continued to do all that they had done under previous super-sized strategies. Reductions in force structure proposed in each iteration have not resulted in substantive changes in operations of the force. Instead, the armed forces have been asked to do more with less and continue to

the defense budget has yet to be proven.

- An obsessive hunt for technological silver bullets could be our military's ruin, not its salvation – if it comes at the expense of medium-term needs.

To endure as a global power, the United States must never be in the position – as it is now in danger of finding itself – of committing its last reserves of military power to any single theater. Instead, force planners need to expand the size of the armed forces using the capabilities on hand. American forces must commit to permanent forward presence where they can effectively deter threats before they rise to the level of hostilities.

To facilitate these goals, the strategy should focus not only on the need to decisively defeat our enemies, but also to support the steady-state operations American forces undertake each day to deter our adversaries and reassure our allies in priority theaters abroad.

■ Define Objectives, Set Strategy

The National Defense Strategy must prioritize missions – and by extension – clearly delineate what it can stop doing. In the last decade, the U.S. military outsourced airlifting of troops to Iraq to Russian companies, NASA hitched rides into space also from Russia, Marines embarked on allied ships for missions patrolling the African coast, cargo shipments to Afghanistan were delayed due to inadequate lift during hurricane relief efforts, a private contractor evacuated U.S. and local troops after the ISIS affiliate ambush in Niger, and the Air Force has outsourced “red air” adversary training aircraft to contractors. This is just a sample of tasks that are being curtailed as the military struggles with fewer resources and finds it cannot actually do “more with less.”

Not all of these capabilities need to be restored – in some instances, it may be more efficient to continue to outsource ancillary assignments that don't necessarily require military forces to prosecute. Instead of papering over these realities, the new strategy should spell out

explicitly what sacrifices the force could make, and signal to allies and partners where they could be most helpful, in order to allow the Department of Defense to concentrate on its most critical missions.

Rosy assumptions need to go. Assumptions about international affairs that underpinned the last administration's force planning – that Europe would remain peaceful, that the United States was dangerously overcommitted across the Middle East, and that a “re-balance” to East Asia could be accomplished without a substantial increase in forces – have all proven incorrect.

The new strategy also has to combat unrealistic assumptions about the Department of Defense – such as the belief that reforms and efficiencies will generate significant savings that can be reinvested

counterterrorism – synonymous with the Joint Chiefs' “four-plus-one” list) has persisted into this administration. Given the finite supply of American defense capacity, not all of these threats can receive the same amount of attention – nor should they. Force deployments must be rationalized to prevent the use of capabilities intended for high-end wars or deterrence being worn down in the long grind of ongoing anti-terror operations. Stealth aircraft should not be performing fire support missions against the Taliban that could be handled by robust army artillery, for example.

The Pentagon is bigger than a Department of War. Fighting and winning the nation's wars is a core mission of America's military. Preventing them is equally important. Daily, the U.S. mili-

An obsessive hunt for technological silver bullets could be our military's ruin, not its salvation...

elsewhere in the defense budget, and that the Pentagon will certainly become more innovative when money is tight.

Global force management is not a substitute for strategy. Because campaigns can now occur across geographic boundaries and within multiple domains of warfare at the same time, the default strategy-in-motion has become global force management. Despite the flexibility it generates, this is not a substitute for strategy. The world is not one global combatant command, nor does any one leader, commander, or service have the ability to manage complex contingencies as if it were. The forthcoming strategy must restore classic force planning and development to Pentagon processes.

Claiming all operations are equally important is not strategy, it is the absence of one. Former Defense Secretary Ash Carter's list of “five challenges” (China, Russia, Iran, North Korea, and persistent

tary is active in maintaining a regular presence around the globe, cooperating with allies, and checking potential aggression. These “peacetime” presence and steady-state activities are the most effective – and certainly the cheapest – use of military power. The Pentagon must more accurately size the military to not only fight and win multiple contingencies at once, but also to conduct the multitude of routine missions, deployments, and forward presence that advance and protect American interests overseas.

It's getting harder to differentiate between war and peace. The dangers of assuming Europe is a net producer of security became apparent the moment Russia annexed Ukrainian sovereign territory. In a single stroke, the Pentagon's last strategy was rendered moot. The rise of ISIS further showcased the perils of American withdrawal from the Middle East. Coupled with increasing Chinese and North



The Pentagon in Washington, D.C., headquarters of the U.S. military. (Photo: Ivan Cholakov)

Korean bellicosity, these theaters are obviously vital considerations for U.S. military planning, even if active hostilities involving American troops are not underway in all of them simultaneously.

■ **Tailored Responses, Even During Peacetime**

Each of the five challenges to American security is unique and requires tailored responses, even in peacetime. Ballistic missile defenses have immense use against North Korea, but little utility against ISIS. As each of our competitors focus on a particular suite of niche capabilities – from Chinese maritime capabilities to Russian land power and electronic warfare – America is in the unenviable position of needing to respond to all of them. To manage the expense of this endeavor, efficiencies must be found to deter and mitigate certain threats within an acceptable margin of risk in order to concentrate additional resources on more pressing ones.

The clearest example is terrorism, which is a relative threat and not an

existential one. The NDS must recognize that countering terrorism will be a generational struggle that can be managed more gradually and cheaply than efforts to counter immediate and monumental threats, such as North Korean ICBMs.

Organize for three theaters, not two wars. The degradation of the two-war standard since the end of the Cold War has left the nation with a one-plus-something strategy that is neither well understood nor universally accepted by policymakers or service leaders. Planners

a clear distinction between the forces, capabilities and posture required to prevent a war against a near-peer state versus those needed to win one should it break out.

While deterring further Russian and Chinese aggression requires advanced aerospace capabilities, the principal presence missions would fall on maritime forces in the Pacific and land forces in Europe. In the Middle East, the situation is quite different; there is no favorable status quo to defend. Securing our re-

American forces undertake each day to deter our
adversaries and reassure our allies in priority
theaters abroad.

should size forces to maintain robust conventional and strategic deterrents in Asia, Europe, and the Middle East, and equip a force-for-decision in the event deterrence fails. The NDS must make

gional interest requires not just presence, but an active effort to reverse the rising tide of adversaries: Iran, ISIS, al-Qaeda and its associates, and now Russia. If we hope to remain safe and prosperous,

America can neither swing among these theaters, nor retreat to the continental United States. Forces can and should be tailored to the needs of each.

These forces must be of a size and quality to be operationally decisive and a balanced “capacity of capabilities”

of a given capability can introduce risks and decrease the efficiency of U.S. forces. One obvious example is the degradation of Army short-range air defense (SHORAD) and an overreliance on increasingly scant Air Force interceptors to maintain air superiority. Competition

the latter challenge, but new investments will need to be tied to clear strategic goals in order to address the former. We cannot repeat the mistakes of the early 2000s when billions were squandered on cancelled research and development programs that fielded little to nothing because they were not tied to the threats America faced.

Investments must balance the needs of today, the medium term, and wars of the 2030s. To alleviate strain on the current force, it will need to grow. This expansion of capacity should be undertaken immediately and with currently available equipment and technology rather than forestalled in pursuit of tomorrow’s super weapons. Over-investing in near-term readiness and speculative capabilities not only introduces a large amount of acquisition risk, it also creates a dangerous situation in which adversaries know we are weak today and will be strong tomorrow. Facing this scenario, they would see that it’s better to strike now than later.

In this way, more investment in our military could worsen American se-

... “peacetime” presence and steady-state activities are the most effective – and certainly the cheapest – use of military power.

across air, land, sea, space, and cyber domains is necessary to provide the widest possible set of options to campaign planners (and the president).

■ **Develop New Capabilities to Over-Match**

Presence missions and train-and-advise efforts are crucial to support our allies, but firepower is ultimately what deters our foes. The new defense strategy should concisely outline the core competencies required of each service by region and threat, and over varying time horizons and levels of risk. It should concentrate development of new capabilities to restore as much technological overmatch as is possible. Planners should also seek opportunities to generate efficiencies when possible. For example, introducing a series of Armored Cavalry Regiments permanently stationed in Eastern Europe comprised of combined arms units would not only provide a powerful U.S. presence to counter Russia, but also would allow regional partners to better develop their domestic capabilities through increased opportunities for bilateral training and exercises.

The American military needs more inter-service competition, not less. In some respects, the individual services have become too dependent on one another. Having the entire military rely on an individual service as the sole provider

among the services – for missions and for resources, for example – is the key to innovation. Beyond the advantage of having redundant tactical and operational tools at hand in the event one fails or proves to be easily countered, competition fosters a richer and more diverse discussion of the nature of war and serves as a check on the American propensity to rely too heavily on technological solutions to military problems.

...competition fosters a richer and more diverse discussion of the nature of war and serves as a check on the American propensity to rely too heavily on technological solutions...

The Budget Control Act must no longer be the scapegoat. By attributing most or all of the current force’s problems to sequestration and ignoring their historical context, policymakers wrongly assume that solutions are simple (e.g., higher defense topline alone will solve the military’s woes). The next National Defense Strategy will need to account for two compounding problems. First, the international situation is deteriorating. Second, our fiscal ability to support all instruments of national power is declining. Higher spending can alleviate

curity unless it is properly managed to alleviate any potential gap in American readiness to deter and, if necessary, defeat our foes. Policymakers must avoid a “barbell” investment strategy that de-emphasizes the medium-term needs of the 2020s.

It is time for strategy to make a comeback in American defense thinking.

MACKENZIE EAGLEN is a resident fellow at the American Enterprise Institute specializing in defense strategy, defense budgets, and military readiness.

Israel: America's Ally by the Numbers

by JONATHAN HONIGMAN

While the United States has long been willing and able to support its allies, with a massive debt and prosperous friends refusing to sufficiently fund their defense, the costs have become unreasonable. For many American partners, several generations without experiencing armed conflict has set a low standard as to what should be expected of them in both their own security and that of the broader Western world. Israel has been a bright spot in America's pursuit of like-minded nations who pay their fair share and play a constructive military role in safeguarding mutual interests.

■ *Discarded Priorities*

Currently responsible for over one-third of the world's military expenditures, Americans have grown restless with the financial outlays expected of them in maintaining global order. Though representing 35 percent of NATO's population, and under half its GDP, the U.S. accounts for 70 percent of its defense spending. This has amounted to roughly 3.5 percent of GDP in America while other NATO members have collectively spent below 2 percent since 2000. This is to say nothing of the non-NATO European states that are granted de-facto protection given their location, or that several NATO allies still profit greatly from their arms industries (which for instance, together exported more equipment than the United States between 2007 and 2011). America is also treaty-bound to defend Japan – which is the world's third-largest economy yet spends only 1 percent of its GDP on security.

Unlike so many other allies who have thrived under American patronage

while refusing to adequately contribute to their defense, Israel has long sacrificed to ensure it can protect itself. Its military spending was 9 percent of GDP between 1957 and 1966, 21 percent between 1968 and 1972, and 26 percent between 1974 and 1981. Throughout the 1970s, its defense commitment was four times the rate NATO countries and five times that of Warsaw Pact countries. Though able to relax its spending since then, Israel's 5.5 percent defense allocation is today still the highest in the Western world. While over one-fifth of all U.S. service personnel were stationed abroad between 1950 and 2014, and Israel was heavily outnumbered in all four of its major wars, its compulsory military service has ensured that no American soldier would ever be called upon to fight on its behalf.

Though a large beneficiary of American aid, Israel is not at all alone. Beginning with the Marshall Plan, which provided over \$103 billion to Europe between 1948 and 1952, the United States has used aid as a strategic means to retain alliances. The United States has given more than \$109 billion to Afghanistan and over \$70 billion to Pakistan,

the trillions spent all together on military operations within those countries. Further, with Israel's aid from the United States between 1946 and 1966 representing one-fourth of Turkey's, one-third of Pakistan's, and less than either Egypt or Iran, substantial American support did not arrive until the late 1960s when Israel had proven itself to be the region's focal anti-Soviet actor.

■ *Military Capabilities Matter*

Beyond the reasonable expectation that an ally properly finance its defense, America needs battle-tested partners. While initially refusing to sell Israel meaningful weapons, as Egypt, Syria, and Iraq gravitated toward the Soviet Union, America became its primary supplier and accounted for 94 percent of its imported arms between 1967 and 1988. The Soviets accounted for 86 percent of Egypt's imported arms between 1955 and 1976, 93 percent of Syria's between 1955 and 1988, and 77 percent of Iraq's between 1958 and 1988. By 1982, Israel had as many tanks and jets as West Germany – a country then with fifteen-times its population and thirty-times its GDP.

Israel has been a bright spot in America's pursuit of like-minded nations who pay their fair share and play a constructive military role in safeguarding mutual interests.

while Arab countries combined received 50 percent more aid than Israel between 1946 and 2013. These figures do not include (and indeed pale in comparison to)

Between 1966 and 1982, Israel played an essential – if not the principal – role in the Cold War's battle-fronts and its many victories were of

great strategic importance for America and the West. As several vital American weapon systems first saw real combat with Israel (including the HAWK surface-to-air missile [SAM], both the F-15 and F-16 fighter jets, and AWACS [Airborne Warning and Control System Aircraft]), it was able to provide valuable lessons – particularly during American peacetime.

As the Soviet Union could not compete with the West's civilian technology or economic aid, military exports to underdeveloped allies were its fundamental avenue for projecting influence, and that process was greatly hindered by Israel's repeated success with Western weapons. Meanwhile, American arms exports grew eight-fold between 1968 and 1974, accounted for half of global sales between 1966 and 1976, and were twice that of the Soviets in 1973. Israel's aerial dominance with F-15s (those sold to Israel represent less than 5 percent of the total produced but account for over half of the jet's flawless 104:0 air-to-air kill ratio) and F-16s in the late 1970s and early 1980s played an important marketing role that helped make aircraft 39 percent of all U.S. foreign military sales during the 1980s.

Between 1964 and 1967, America's cumulative military allotment was 26 percent larger than that of the Soviet Union – and the disparity was over twice as large between NATO and the Warsaw Pact. As American spending was greater than Soviet, the continual rearming of Syria and Egypt following their various defeats was that much more costly. Over one-third of all Soviet military aid to the Developing World between 1956 and 1978 went to Syria and Egypt (68 percent went to Arab countries). Not only did Syria, Egypt, and Iraq each receive more during those pivotal years than any other non-aligned state, their aid even exceeded that given to fellow Communist states such as Cuba, North Korea, and North Vietnam.

These expenditures represented money, arms, and training that could



Captain Munir Redfa, an Iraqi fighter pilot, who worked with Mossad in 1966 to fly his Soviet-designed MiG-21 to Israel and defect.

have gone to Soviet allies elsewhere. For example, as the Vietnam War continued to rage between 1968 and 1972, Soviet military aid to Syria and Egypt was 60 percent larger than that given to North Vietnam. Between 1955 and 1978, Arab states accounted for half of the Developing World's 44,000 military personnel trained in the Soviet Union, and by 1978, over 57 percent of all Soviet military advisors in the Developing World were stationed in Arab countries. The Soviets often delivered state-of-the-art weaponry to their Arab allies before even arming Eastern Europe – including SA-3 SAMs to Egypt in 1970, and T-72 tanks, MiG-25 jets, and SA-5 SAMs to Syria in the early 1980s.

■ Technology Transferred

Along with undermining Soviet-built arms in battle, Israel captured fully-intact weapons and introduced them to Western analysts. It seized over three hundred tanks from Syria and Egypt, including the T-62 in 1973 when it was the mainstay of the Soviet army and comprised 75 percent of the tanks in East Germany facing NATO forces (several were transferred to NATO). The MiG-21

was the most widely produced supersonic fighter jet ever and was exported all over the world – including as the most cutting-edge fighter facing American pilots in Vietnam. In 1966, after an elaborate Mossad operation seeking him out and securing safety for his family, an Iraqi pilot defected to Israel in what became the first MiG-21 in Western hands. Israel subsequently loaned it (along with two MiG-17s obtained from Syria) to the United States in 1968.

The SA-2 SAM famously shot down American U2 spy planes over the Soviet Union in 1960 and over Cuba during the 1962 crisis, and also brought down 205 American aircraft during the Vietnam War – including that of Senator John McCain. Israel's troops seized nine SA-2s in the 1967 War – along with a complete set of blueprints and operating instructions which they later lent to the United States. In December 1969, Israeli commandos even managed to acquire a complete P-12 radar station (typically used in conjunction with the SA-2 SAM), and later sent it as well to America. Surely the opportunity to study both the actual SA-2 SAM and its P-12 radar played a major role in reducing North Vietnam's SA-2

hit-per-launch ratio from 1:15 in 1965 to 1:50 in 1972. Israel also captured several advanced SA-6 SAMs in the 1973 War and passed them along.

■ **Battles Won**

In the 1967 Six-Day War, Israel was outspent by 55 percent and outnumbered 15:1 in population, 2:1 in troops, and 3:1 in tanks and combat aircraft. In under 130 hours, it destroyed over four hundred Arab aircraft (while losing less than fifty), meted out a 25:1 casualty ratio, and obtained \$2 billion worth of Soviet-built weapons. Of particular importance considering its small geographic size was that

surprise attack on its holiest day of Yom Kippur, Israel ejected the Syrians from the Golan Heights within five days, began a successful counterattack against Egypt within 10 days (which included the largest tank battle since World War II), and won the war within three weeks with its troops 63 miles from Cairo and 25 miles from Damascus. In what became the first missile-to-missile naval battles in history, Israel's sailors (while facing missiles with twice their range) introduced electronic countermeasures to naval combat, prevented all of the fifty-two Soviet-built Styx missiles fired at their ships from making contact, and

were) or by SAMs, this meant that Israeli pilots shot down approximately 350 Arab planes while Arab pilots shot down roughly five Israeli planes.

The SA-6 SAM first saw combat in 1973 and accounted for the majority of Israel's 50 lost jets in the first three days of the war. The following years left Western states reasonably fearing that their planes would not be able to gain superiority against an integrated Soviet SAM network. In the initial phase of the Lebanon War in June 1982, Israel's air force destroyed all 19 Syrian SA-6 SAMs in the Bekaa Valley while simultaneously shooting down 64 Syrian jets without any losses in the largest air battle the Middle East has ever seen. With the SA-6 stationed throughout Eastern Europe and exported to more than 20 countries outside the Warsaw Pact, this defeat challenged a system deployed to protect Soviet allies and clients around the world. On July 1, 1982, the Soviets felt obliged to take the rare step of publicly denying that their weapons supplied to the Arabs were inferior to Israeli and American arms. Israel then shared with the United States its lessons from battling Soviet-built equipment in the Lebanon War.

■ **America's Path Forward**

Israel is a global military power that today has the 15th largest defense budget, exports the eighth-largest amount of military hardware and the second largest number of cyber-security products, and alone accounted for a majority of drone exports between 1985 and 2015. As the U.S. continues to grapple with rising competitors and complacent friends, Israel's combat effectiveness and defense investment can continue to serve as a positive blueprint for other allies. America would be wise to maintain the vital support that it has given Israel so that many more strategic benefits can be gained.

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Along with undermining Soviet-built arms in battle,
Israel captured fully-intact weapons and introduced
them to Western analysts.

after seizing control of the Golan Heights and Sinai Peninsula, Israeli soldiers were closer to Damascus and Cairo than either Syrian or Egyptian troops were to Tel Aviv or Jerusalem.

Throughout its many battles between the 1967 and 1973 wars, Israel killed over 12,000 enemy fighters – 17 times the number of Israeli casualties. In one audacious mission in September 1969, Israeli forces crossed the canal and (masquerading as Egyptian forces in captured tanks) handily destroyed military installations for some 10 hours and over a 50 mile stretch – the news of which gave then 51-year-old Egyptian President Gamal Abdel Nasser a heart attack. Its air force shot down roughly 160 planes while it lost around a dozen – including the July 30, 1970 air battle in which Israeli pilots took on Soviet pilots in Egyptian-marked jets and downed five without losing any of their own.

In the 1973 War, Israel was outnumbered roughly 2:1 in troops, combat aircraft, tanks, and naval vessels. After suffering a severe blow from the

destroyed or commandeered some 48 Arab vessels without any losses.

To assist their Arab clients, the Soviets conducted the largest airlift in their history, and the Americans soon followed and resupplied Israel. Having a destination nearly four times farther away, and flying 40 percent fewer missions, the Americans delivered 50 percent more cargo than the Russians. This showcased America's far superior ability to quickly transfer heavy supplies over long distances. Perhaps it was not coincidental that Egypt's first major purchase of American military equipment in 1976 was six transport planes.

With a material loss double that of their 1967 defeat, Arab forces lost twice as many tanks and four times as many aircraft as Israel. All but a handful of Israel's 105 lost planes were destroyed by SAMs rather than Arab jets and even then, Israel's loss-per-sortie ratio actually declined compared to the 1967 War. As only about one-tenth of the Arabs' 395 lost aircraft were destroyed either on the ground (as the vast majority in 1967

Enabling China's Weapons Hacking

by **STEPHEN D. BRYEN**

For years, the Pentagon has been pretending to be securing its computer networks from Russian and Chinese hacking. But while wasting huge resources on an impossible futile task, it has sponsored the development of weapons systems that themselves are wide open to hackers. The net result is that cyber insecurity has escalated exponentially. You don't have to look far for examples:

If you were somewhere near the South China Sea, on the islands and reefs China has seized illegally, you might be

What is true of the F-22 is true of many other weapons systems and programs. America spends tens of billions of dollars on Research & Development (R&D), testing and re-testing super-secret technology. But China is privy to much, if not all of the developments taking place in U.S. defense laboratories and defense contractors. It even stole from Los Alamos.

As early as 1999, *The New York Times* revealed China had stolen the design of the W-88 nuclear warhead from the Los Alamos National Laboratory.

China is privy to much, if not all the developments taking place in U.S. defense laboratories and defense contractors.

buzzed by one of China's stealthy J-20 fighter bombers. How can China, a country that has always needed a lot of help to build warplanes, field an airplane that uncannily resembles the F-22, America's overall best stealth fighter-bomber? Because, while the Europeans, Israel, and most of all Russia, have supplied aircraft designs to China, the United States is the single biggest supplier.

No. The United States does not sell F-22 blueprints to China; but China has them. They were obtained mostly by hacking the Pentagon's defense contractors and their suppliers. How did they know where to look? They hacked Defense Department computers to get the lists of all the suppliers, subcontractors, and equipment manufacturers. From there, it was easy.

The W-88 is a miniaturized design that allows for mounting multiple nuclear warheads (called multiple independently targeted reentry vehicles, or MIRV) on long-range missiles. Senior officials from the Energy Department, who manage U.S. nuclear weapons development, found that not only was Los Alamos compromised by Chinese espionage, other development centers were as well.

American security on small nuclear warhead design was so poor that the same W-88 design appears to have got into the hands of the Khan-Pakistan nuclear technology smuggling network – whether from the Chinese or others. A possible copy was found on a Dutch businessman's computer linked to the Khan network, and possibly similar

documents were uncovered in Libya.

The New York Times story explained that there was extreme resistance to investigating the Los Alamos leak, mostly in an American government effort to protect U.S.-China economic relations.

■ **Markets over Cybersecurity**

Behind the internal struggle was the fact that American companies saw huge potential markets in China and allegations of espionage and data theft could well derail the chance to enter and develop business there. Even today, now that most if not all of America's top companies are not only selling but manufacturing in China, America gives lip service to the danger of Chinese hacking, but does not retaliate when it happens, even if the result is the compromise of U.S. military equipment and the corollary of endangering the lives of our men and women in uniform.

Indeed, one of the key reasons we do not have a serious missile defense capability is that we do not want to antagonize China. It was only the emergence of the North Korean threat on one hand, and the Iranian one on the other, that has prompted more, though still hardly adequate, American investment in missile defense programs such as PAC-3, SM-3 and Thaad (terminal high-altitude area defense).

And there are other reasons the United States has trouble dealing with Chinese espionage, whether cyber or human.

Before the late 1980's, the Pentagon relied on specially designed electronics comprised of parts made in the United States and shielded to limit electronic emanations that could be intercepted.

The idea was that Russia could intercept information from computers and equipment that had embedded computers using radio intercept technology. The program was called Tempest and it was required anywhere classified information was being used.

Aside from shielding from the Russians, Tempest had practical application, for example protecting the electronics of aircraft from civilian hazards, such as powerful radio transmitting towers.

One of the problems facing the Defense Department is the use of embedded computers, which ... often are produced in Chinese factories and typically run old versions of Microsoft Windows software.

In 1984, a German Tornado fighter aircraft crashed when it flew too close to the VOA transmitter near Munich, Germany. During a B-52 nuclear long-range bomber and missile interface unit test, an un-commanded missile launch signal was given. Among the contributing factors was crosstalk in the systems' wiring and EMP (radio wave) interference. And now that we use GPS for navigation and warfighting, the Russians and Chinese can jam our systems, as the Russians recently did in Norway.

By the early 1990's, the Pentagon decided it did not need to have Tempest computers (although it kept Tempest building enclosures for a few highly classified meeting rooms, referred to in Pentagon lingo as "tanks"). But outside of the tanks, the Pentagon turned to "commercial off the shelf" (COTS) technology for tens of thousands of computers, deciding it was more cost effective. As the name implies, the product are the same ones you can buy in stores. The earliest popular COTS computer in the Pentagon was the first PC made by IBM (now Lenovo, a Chinese company) in 1981. Assembled in Boca Raton, Florida, it cost about one-fourth

as much as the Raytheon Lexitron, the Tempest desktop.

Many of these IBM PCs were connected through networks to larger mainframe computers. Some of them, like the IBM-360/370 in the Pentagon network, had already been obtained illegally by the Russians (ES EVM or EC ЭВМ, Единая система электронных вычислительных машин, Yedinaya Sistema Electronnykh Vychislitel'nykh Mashin, meaning "Unified System of Electronic Computers).

■ *Made by America – in China*

The original IBM PC was made up of parts sourced both in the United States and abroad, and as PC technology evolved quickly so did manufacturing outsourcing. Integrated circuit assembly migrated to Asia followed by floppy drives and hard disks, and soon everything except the Intel microprocessor was produced abroad, increasingly in China. Today somewhere between 70

United States or from other advanced producers such as Japan, South Korea and Taiwan. American export control laws have been systematically liberalized to enable the China market to grow and flourish. America's allies and friends sell manufacturing technology freely to China, set up factories in China and manufacture for global markets, often under well-known brand names.

For example, Foxconn (Hon Hai Precision, a Taiwan-owned electronics company) is the world's largest electronics contractor company. It builds products for Acer, Apple, Amazon, Blackberry, Google, Hewlett Packard, Microsoft, Motorola, Sony and Toshiba. It employs over 800,000 people, with the largest number in China where it supports 12 factory locations (many of them with multiple factories at each location) in nine different cities. The bottom line is, if it says Apple, or Dell, or HP on the box, more than Intel is inside.

China has been known to compromise the products it sells. A good example are memory sticks that are widely used for storing data. A new generation of memory sticks can store up to 1 terabyte of data. A single stick can hold 75 million pages of data or text, or about 18,750,000 documents, assuming four pages per document. The market natu-

... 70 to 80 percent of the Pentagon's COTS computers are Chinese in whole or in part.

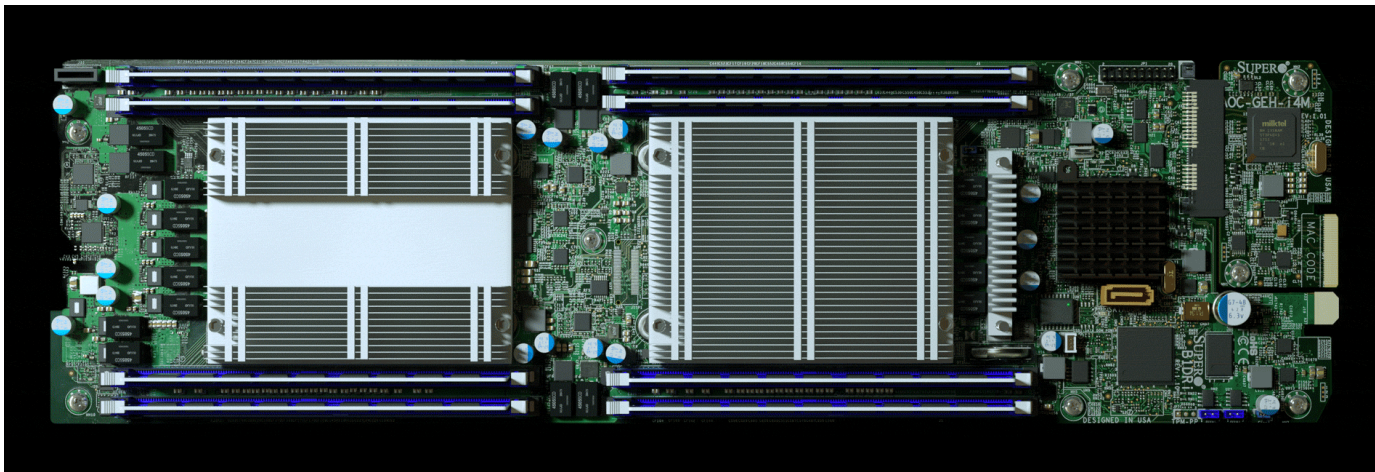
and 80 percent of all commercial electronics are made in China meaning that 70 to 80 percent of the Pentagon's COTS computers are Chinese in whole or in part. The same applies to computer network equipment and communications hardware, even sensors of all types.

Most of China's electronics technology manufacturing know-how and production equipment comes from the

rally enough, is robust, with approximately 16 million sticks sold each year.

Unfortunately, there is no easy way to secure commercial memory sticks, and even so-called "secure flash" memory sticks may have vulnerabilities.

The Pentagon has an official policy banning commercial USB memory sticks as serious security risks, but it is poorly enforced and the Pentagon has



The logicboard of a server supplied by Elemental Technologies that allegedly includes an unauthorized Chinese chip. (Illustration: Scott Gelber For Bloomberg Businessweek)

granted so many exceptions as to make the ban meaningless.

China has also bugged equipment sold commercially, including web cameras, microphones, and routers. Yet DOD is using Chinese cameras at sensitive military bases where they are part of perimeter security systems. Other government agencies, among them the State Department, have installed Chinese cameras in embassies, including in Kabul, Afghanistan. Despite understanding the massive vulnerability of Chinese cameras (and American cameras that are put together from Chinese parts), the United States still has no government policy against using Chinese cameras for security.

Recently, China was discovered to have “sneaked spy chips into Super Micro servers used by Amazon, Apple, the U.S. government, and about 30 other organizations,” according to Bloomberg news. The servers were supplied by Elemental Technologies, and according to Bloomberg, “Elemental’s servers could be found in Department of Defense data centers, the CIA’s drone operations, and the onboard networks of Navy warships.” The “chips allowed the attackers to create a stealth doorway into any network that included the altered machines. Multiple people familiar with the matter say investigators found that the chips had been inserted at factories run by manufacturing subcontractors in China.”

■ **Embedded Computers**

One of the problems facing the Defense Department is the use of embedded computers, which, like their desktop and server counterparts, often are produced in Chinese factories and typically run old versions of Microsoft Windows software.

America’s Virginia-class attack submarines – our most modern, nuclear powered attack submarines – use Windows XP for vital functions. XP, which has always been a security nightmare,

network could work its way into crucial systems on a submarine,” he said.

Even tactical systems are clearly at risk today because of commercial software and vulnerable data links.

Consider drones. Drones are increasingly used to carry out vital surveillance, follow and kill terrorists, and for many other security tasks. Drones use COTS software and hardware including Windows XP and other Windows operating systems that are equally problematic.

The United States has to invest in a completely new
type of computing environment that does not use
commercial software...

is no longer supported by Microsoft although the Pentagon recently financed additional Microsoft support at least for the next couple of years. That’s because it has no way to easily switch out these computers in major weapons systems.

In 2014, then-head of Naval Sea Systems Command Vice Admiral William Hilarides verified that key systems included processor chips running Windows XP, and worried about hacking – as submarine machinery control systems are analyzed in unclassified computers onshore at warfare centers. “That means a virus that gets onto the unclassified

In December 2011 a U.S. “stealth” drone known as the RQ-170 Sentinel, was captured as it operated overhead near the city of Kashmar in northeastern Iran. The Iranians were able to control the drone and guide it to a landing on their territory. According to Iran, this was accomplished by a special cyber team that was able both to jam the incoming signal from a satellite and replace it with its own commands.

Also in 2011 a computer virus infected the cockpits of America’s Predator and Reaper drones that carry Hellfire missiles.

Something similar happened in



American soldiers update anti-virus software for the Air Force to assist in the prevention of cyberspace hackers at Barksdale Air Force Base. (Photo: U.S. Air Force)

Israel. In 2013 an Israeli Shoval (Heron) drone was hijacked on a mission over the Mediterranean Sea between Tel Aviv and Netanya. The hijacking was done either by Hezbollah or Iran, with the betting being on Iran. Israel grounded the fleet until better security could be implemented.

There is a good chance that the Is-

countries such as Finland and Sweden, buy COTS including embedded computers, there is no centralized security review of COTS products. Vulnerabilities, when they are found, are (sometimes) patched if they can be and if the affected agency doesn't get a waiver to delay implementing a change. Waivers are given for such reasons as the system

Google has refused to sell its cloud services to the Pentagon for "moral" reasons. Does that mean the Pentagon isn't obliged to help Google out if it is attacked by a foreign adversary?

raeli drones, like the American ones, use commercial operating systems software to manage drone missions. Presumably the Iranians had little trouble figuring this out.

■ Patching and Fixing

While DOD and its counterparts in NATO and Israel, as well as in the Asia Pacific region (South Korea, Japan, Taiwan, Singapore, Australia) and neutral

being in use and that shutting it down would disable a vital requirement such as an aircraft, a missile or a submarine on a mission.

It is time to consider dumping COTS products, with those containing Chinese parts first on the scrapping list. It is reckless for the U.S. government and military to use these products since they are exposed to systematic hacking.

■ A Short-Term Fix

A partial short-term fix is for all data on U.S. computer networks to be encrypted with strong encryption. This does not prevent certain kinds of attacks on our networks including denial of service and border gateway protocol attacks that recently redirected Google's Cloud network. (Ironically, Google has refused to sell its cloud services to the Pentagon for "moral" reasons. Does that mean the Pentagon isn't obliged to help Google out if it is attacked by a foreign adversary? That would seem to be fair play!) But it makes it hard for a competitor or adversary nation, e.g., China or Russia, to read our mail. But to keep command and control military networks viable, and key parts of the critical infrastructure operational (such as power plants and communications), the short-term fix is not good enough.

■ A Long-Term Fix

The United States has to invest in a completely new type of computing environment that does not use commercial software, is triple encrypted – meaning the network, the nodes on the network, and the individual sites are separately encrypted. This way cracking into sensitive networks is nearly impossible and denial of service and border protocol attacks can better be prevented or contained.

We are already vulnerable, and our security and economic interests are being eroded daily. So, either we move to a new solution and completely overhaul our computer networks and their embedded counterparts, or we will become a second-rate power intimidated by Russia and China, or even worse.

Until there is internal change, the Pentagon is not a responsible steward of American national security.

STEPHEN D. BRYEN, *Ph.D.*, is president of SDB Partners, former Undersecretary of Defense for Trade Security Policy and head of the Defense Technology Security Agency at DOD.

Strategic Challenges: Near East Gateways to Europe

by **SETH CROPSEY**

Policy analysts and planners draw a line between Europe and the Middle East. Security dynamics, strategic planning, political arrangements – they neatly fall into regional boxes.

The reality is more complex. The Middle East, and its adjacent bodies of water – the Levantine Basin, Red Sea, and Arabian Gulf – is at the southern end of the fault-line between Europe and Asia. From the Zagros mountains extends a cone that covers the Central Asian steppe and Russian tundra to the East and the borderlands of Eastern Europe to the West. In terms of mineral and energy deposits, particularly oil and uranium, most of the world's energy and mineral abundance lies here. Halford Mackinder was prescient when he termed this the "Eurasian Heartland."

Not only is the Middle East the southernmost tip of the Eurasian heartland – it is also the most convenient transit link between Europe and Asia. Despite predictions of land transport superseding maritime shipping as the major mode of international movement, roughly nine-tenths of commercial goods today are still shipped by sea. Nearly 50 ships per day pass through the Suez Canal, the natural chokepoint for trans-Eurasian maritime movement.

Any power or coalition of powers that seeks to control Eurasia must control the heartland. But the heartland is geographically bound by frozen seas to the north, and land borders or maritime chokepoints to the south, east, and west. European, and Eurasian history is a series of struggles over control of the Heartland and its adjacent seas – specifically, the

Eastern Mediterranean, Red Sea, Arabian Gulf, and Black Sea.

The Greek city-states remained free mostly because of the "wooden walls" of Athenian triremes. Alexander toppled the Achaemenid Empire despite its control of the Levantine Basin, by conquering what is modern Lebanon, Israel, and Egypt. This denied Persians access to the sea. Ottoman power waxed as the Empire extended its reach over the Levantine Basin and Black Sea, and waned as it lost both. It is no coincidence that the Battles of Salamis, Actium, Lepanto, and

skeptical about Western modernity. But unlike its Sunni Wahhabi and Salafi rivals, whose adherents want a return to seventh-century barbarism, the Iranian regime does not reject modernity wholesale. Rather, it believes that modernity should be Islamic in character imbued with the revealed truths of Mohammed's Quran. Politically, culturally, and spiritually, the regime's leaders believe that Persia is best equipped to lead the Islamic world into the modern age, and that under Persian leadership, Islam can lead the world.

The spirit of Iran's theocratic oligarchy is expansionist. The regime is deeply skeptical about Western modernity.

the Nile occurred within a 400-mile diameter circle.

Politically, geographically, strategically – in all three categories, the Middle East, Black Sea, Eastern Mediterranean, Red Sea, and Arabian Gulf should be viewed as part of one continuous theater. The actions in one part of this broader theater modify the balance of power in all the others.

■ *Iranian Interests*

The connection between the Eastern Mediterranean and Black Sea on the one hand and Middle East on the other, illustrates the extent of Iran and Russia's regional ambitions.

The spirit of Iran's theocratic oligarchy is expansionist. The regime is deeply

This objective requires, first, control over the Islamic world. With one exception, the entirety of the Middle East is part of the Dar al-Islam. The control of the Middle East is Iran's first goal. The Islamic Republic has already consolidated the region's Shia communities into a loose alliance, creating a corridor that runs from Tehran to Tripoli and Beirut. Iran's support for terror, both globally and regionally, is not defensive notwithstanding that nearly 90 percent of the Islamic world is Sunni. This number is irrelevant. Nearly half the Islamic world lives in five countries – Indonesia, Pakistan, India, Bangladesh, and Nigeria – outside of the Middle East. All five of these countries' Islamic populations are largely Sunni. Therefore, the



Small Iranian vessels in the Persian Gulf harassing the U.S. Navy. (Video Screenshot: U.S. Navy)

politically-relevant sectarian balance of power is closer to five-to-one, not ten-to-one.

Second, none of the three Islamic countries that could oppose Iran's drive for regional domination can do so now. Turkey shows little stomach for opposing Iranian expansion, and shares critical interests with Iran, particularly over Kurdish autonomy. Egypt, more stable than it was in 2013, still cannot be expected to meaningfully project power. Is Saudi Arabia the actual object of Iranian ambition?

Saudi Arabia's population is less than half of Iran's. Its political system rests upon a fragile alliance between the House of Saud and the conservative religious authorities, who both ensure the people's docility through religious control and welfare benefits. Saudi Arabia's defense spending dwarfs Iran's. But the Saudi military, despite its advanced technology and Western support, has proven unable to win the low-level proxy conflicts that characterize its conflict with Iran. A massive Saudi conventional offensive against Iran is difficult to imagine and would face significant obstacles. Either Saudi forces would need to strike through Iraq, practically

invading a legal U.S. partner, or mount a major amphibious operation in the Arabian Gulf. The Saudi Navy is entirely unequipped for the latter operation, while Saudi land forces would likely encounter similar difficulties fighting Iranian-backed Iraqi paramilitaries as they have in Yemen. An air offensive would face similar issues. Saudi F-15's and

heavy toll on a Saudi/GCC strike mission.

Iran, in sum, has little to fear offensively from Saudi Arabia. Finally, few countries are blessed with such defensible geography as Iran. The Zagros mountains protect nearly all of Iran's major population centers, allowing Iran's ground forces and Navy to concentrate on defending Khuzestan and its

The Islamic Republic has already consolidated the region's Shia communities into a loose alliance, creating a corridor that runs from Tehran to Tripoli...

Eurofighter Typhoons would outclass Iran's MiG-29's and Chengdu F-7's, not to mention Iran's ancient F-14's, F-4's, and F-5's.

But Iran has a full suite of Russian-built air-defense systems that it would operate alongside its fighters. In a functionally uncontested environment, the Saudi Air Force has lost one F-15 and one Eurofighter Typhoon in Yemen. At a minimum, despite their technological disadvantage, one can expect Iranian fighters and air defense forces to take a

oil-production facilities. Even the United States would find it difficult to invade and subjugate Iran. Either severe paranoia, or a genuine expansionist impulse, underlies Iran's regional aggression.

The logical next steps of Iran's strategy are maritime. By consolidating control over the Arabian Gulf, contesting control of the Strait of Hormuz and Gulf of Aden, and controlling, or abetting the friendly control of the Levantine Basin, Iran can bracket Saudi Arabia on all sides. Moreover, it can also directly confront its



actual regional rival, Israel. The Israeli Defense Forces is the only Middle Eastern military force genuinely superior to Iran. Israeli intelligence has shown itself capable of jeopardizing Iranian nuclear developments, and the Israeli Air Force, with or without American help, could feasibly strike nearly all major Iranian nuclear facilities, along with military bases in the country's west. And on the ground, only the IDF's special forces pose a legitimate threat to the IRGC's Quds force. Of course, Israel cannot be said to hold hegemonic aspirations – it could not control Gaza or South Lebanon, and barely holds the West Bank. But its robust military capabilities, combined with an undeniable will to fight, make Israel Iran's most dangerous adversary.

Iran's two areas of strategic interest, then, are the Eastern Mediterranean and Strait of Hormuz. Presence in, or friendly control of, the Eastern Mediterranean would allow Iran to pressure Israel directly, harassing its vulnerable coastline, potential offshore natural gas rigs, and submarine deterrent with naval combatants, long-range missiles and other irregular assets.

Iran's objectives in the Strait of Hormuz are less direct. Sanctions on Iran throughout the 2000s and increases in American oil productivity have prevented Iran from reclaiming its previous share of the EU's oil import market – in 2000, Iran provided 5 percent of the European Union's crude oil, whereas today it provides around 3 percent.

However, this percentage could increase to its previous level, and potentially exceed it if the EU's member states become less willing to do business with Saudi Arabia. Without American forces able to take control of the Strait of Hormuz in a crisis, Iran could target certain states by reducing energy exports. A 3 percent or 5 percent cut in EU crude imports would not go unnoticed. Iran could similarly target India, its third-largest oil consumer, to ward off a partnership between New Delhi and Washington. Thus, although the Arabian Gulf has become less important to Iran, it retains significant strategic value.

■ *Russo-Iranian Partnership*

Iran's interests most clearly overlap with Russia's in the Levantine Basin. Russian expansionism, even more so than its Iranian counterpart, is fueled by paranoia and distrust of the West. Russia's reaction to NATO is the clearest indicator. As an insular power, American interest opposes any power or coalition of powers from gaining control of the Eurasian heartland. This helps explain American intervention in both world wars, and its persistent security presence in Europe after 1945 where the European continent, shattered by six years of conflict, was defenseless in the face of Soviet military power, despite Russia's 20-million-plus war deaths.

A stable balance of power between Russia and the United States is easy to envision. Russia would need to respect the sovereignty of its Eastern European neighbors: namely, the Baltic states, Poland, Ukraine, and the states of the Balkan peninsula and bordering the Black Sea. In return, these states would respect Russian interests, restrained from any revanchist ambitions. Russia's inability to even attempt such a compromise speaks to either a deep paranoia or a fundamentally expansionist outlook. These need not be mutually exclusive.

Russia's objective, therefore, is reasserting its security dominance up to at least central Germany. NATO stands in

the way of this goal. Moreover, Russia can no longer rely on massed tank divisions to smash their way into Central Europe, followed by millions of occupying troops. Rather, Russia must “crack” NATO by stressing the natural fault-lines and divergences of interest within

Eastern Mediterranean, it can pressure NATO’s vulnerable southern European flank. How would Italy react to Russian warships patrolling off the Sicilian coast days before a critical vote on invoking Article 5 over defending Montenegro? Would Spain support a NATO response

against Iran, best expressed through his less restrictive rules of engagement in the Arabian Gulf, should be commended. But the underlying strategic factors remain the same.

Iranian ships persistently harassed American assets in the Arabian Gulf throughout the Obama administration, most visibly capturing an American patrol craft in early 2016. The previous administration chose to focus on the crisis’ “resolution,” hailing it as a benefit of the post-JCPOA U.S.-Iranian relationship. Meanwhile, images of American sailors, with sacks over their heads, were circulated by Iranian social media outlets.

Although this incident was the most prominent case of Iranian harassment, there are others. Iranian fast-boats – small, cheap, lightweight boats armed with machine guns and rudimentary missiles and rockets – consistently harassed American surface combatants throughout 2016 and 2017. Seven Iranian fast-boats harassed the USS Firebolt, a naval patrol ship, in September 2016, making repeated passes at the ship and provoking several warning shots. Iranian drones flew dangerously near U.S. fighter jets, and Iranian sailors even shined

Russian expansionism, even more so than its Iranian counterpart, is fueled by paranoia and distrust of the West.

such a large international coalition. This strategy includes sustaining a frozen Ukraine conflict and supporting nationalist, pro-Slavic groups in whatever European country it can.

But its growing presence in the Eastern Mediterranean is more important. Since its initial intervention in Syria in 2015, Russia has established a significant aviation and naval presence on the Eastern Mediterranean coastline. Russia is repairing the Tartus naval facility to allow it to host major warships. The Khmeimim Air Base can support nearly any aircraft in the Russian Air Force, including the Tu-22M Backfire Bomber, the mainstay of the Soviet Union’s maritime strike force. Russia has defended its installations with an overlapping air defense system, providing the S-300 missile platform to Syria’s armed forces.

By projecting its power throughout the Eastern Mediterranean, Russia can challenge NATO at one of its weakest points. Permanent American presence in the Eastern Mediterranean amounts to a command ship and a handful of guided-missile destroyers optimized for anti-ballistic missile missions and based at the inland sea’s western end. The Italian, Spanish, and French navies lack the numbers to keep up with a large-scale Russian sortie from the Black Sea, while Greece would likely be more preoccupied with Turkish actions than with Russia.

If Russia can establish control of the

to Russian aggression in the Baltics if it detected Russian submarines near Barcelona? How would French warships patrolling to find migrant transports respond to a Russian operational squadron just east of Corsica and Sardinia?

Despite friction between Russia and Iran, ultimately, each is the other’s most logical partner. Russia seeks to keep U.S. and allied interests in the Middle East under constant pressure to prevent a threat to its Mediterranean operations. Iran wants a great power guarantor that can give it

If Russia can establish control of the Eastern Mediterranean, it can pressure NATO’s vulnerable southern European flank.

freedom of action in the Middle East and prevent an American counterattack from the Mediterranean. Israel cannot provide the guarantees that Iran offers Russia. Absent a substantial diplomatic realignment involving Israel, the Gulf States, and Egypt, Russia cannot find a regional partner as reliably activist as Iran.

■ Rules of Engagement

This points to the most visible area of confrontation between Iran and the United States – the Arabian Gulf. President Trump’s more aggressive stance

laser-pointers at U.S. helicopter pilots. According to the U.S. Navy, 30 unsafe or unprofessional incidents occurred between American and Iranian ships in 2016. Such harassment continued – until August 2017, when it abruptly ceased. For nearly a year, Iranian ships have been significantly less aggressive towards American forces in the Arabian Gulf.

This change in Iranian behavior is most likely a consequence of the Trump administration’s resolve, expressed through the president’s willingness to expand the U.S. military’s Rules of



Fighter jets at a Russian military facility in Syria. (Photo: Syria.mil.ru)

Engagement (ROE). Under the Obama administration, American ROE were extremely restrictive, with a variety of vital tactical and operational decisions requiring centralized approval from Washington. By contrast, the current administration has been more willing to authorize commanders' use of force.

The new approach was set with the January 2017 U.S. Special Operation raid against a terrorist target in southern Yemen. Although unsuccessful in its intelligence-gathering mission, and despite the casualties U.S. forces incurred, the mission demonstrated a willingness to use force that had been lacking during the last two years of Obama's presidency. President Trump reinforced this perception with the April 2017 Shayrat missile strike, authorizing a 58-cruise missile barrage against Syrian targets. In February 2018, American forces in Tanf, Syria directly engaged Russian private security forces fighting alongside the Syrian government and its paramilitary partners – unthinkable during the Obama era.

Because of this increased resolve, Iran has been less willing to test American limits since late 2017. No longer restrained by a passive president, U.S. commanders on the ground now have

the full backing of the executive to engage hostile forces if necessary.

But this does not change the underlying strategic situation. As noted, the U.S. Sixth Fleet, responsible for protecting American interests in the Mediterranean Sea, only has five permanent ships assigned to it – four guided-missile destroyers and one command ship. Russia, by contrast, could sortie seven surface combatants and seven submarines from

■ **Certain U.S. Interests, Uncertain Response**

Just as the Iranian and Russian regimes are clear expressions of those nations' political cultures, so is the American regime a reflection of the American people. Slow to act, but decisive in its anger and convinced of its justice, the United States has been an international force for good in no small part because of its citizens' moral character. But in

President Trump's more aggressive stance
against Iran, best expressed through his less
restrictive rules of engagement in the Arabian Gulf,
should be commended.

its bases in the Black Sea, supported by Khmeimim-based aviation and Syria air defenses. Iran's ability to turn up the heat in the Arabian Gulf, it seems, belies a more troubling situation in the Eastern Mediterranean. Control of one is meaningless without control of the other, particularly when the Eastern Mediterranean, not the Arabian Gulf, is the greater strategic prize.

an age of growing partisanship and political strife, the possibility exists that the American people may lose sight of their strategic interests and the defenses needed to protect those interests.

SETH CROUSEY is the Director of The Center for American Seapower at the Hudson Institute.

It Started with the “Peace Dividend”

An *inFOCUS* interview with Representative DON BACON (R-NE)

Congressman Don Bacon (R) serves the 2nd District of Nebraska, sitting on the House Armed Services, Homeland Security, and Agriculture committees. Prior to his election to the House in 2016, he spent nearly 30 years in the U.S. Air Force, retiring as a Brigadier General. During his career in the Air Force, Congressman Bacon specialized in electronic warfare, intelligence, reconnaissance, and public affairs. He served 16 assignments including four deployments overseas, three of which were in the Middle East, including one assignment to Iraq in 2007 to 2008 during Operation IRAQI FREEDOM. *inFOCUS* Editor Shoshana Bryen met with him in early December.

***inFOCUS:* YOU HAVE WARNED OVER TIME ABOUT READINESS, AND THE PROBLEMS THAT LAPSES IN READINESS CAUSE, INCLUDING THE RECENT KC-130 ACCIDENT THAT KILLED FIVE MARINES. WHAT WOULD YOU SAY IS THE CURRENT STATE OF READINESS IN THE U.S. MILITARY; WHERE DO WE NEED MORE INPUTS, AND WHAT DO WE NEED TO DO FIRST?**

Rep. Bacon: We have both a readiness problem and a modernization problem. If we back up, it started with the “peace dividend” that we “received” in 1989-90, after the fall of the Soviet Union, when we thought we could reduce defense spending. Then, after Desert Storm [1991], we were so dominant that we thought we could cut more. We were second to none. Nobody was close – that was the mindset. Then, after 9/11, Congress plussed-up spending, but it went toward counter terrorism operations and training, not to countering a near-peer competitor. Then in 2010, we went into sequester as a budget cutting tool.

The military said “If we do sequester, we want to cut weapons systems or bases.” Congress said no. So, we forced the military to cut operations and training, which hurts readiness. Two years ago, when I came into Congress, we had

the lowest readiness level since 1977. Half the Navy aircraft couldn’t fly. Of 58 combat brigades in the army, only three were ready to deploy to Korea or wherever they were assigned; 55 were not. Our fighter pilots are getting about 40 percent of the flight time that they should have been getting. Nothing like we were getting in the 1990s.

We can’t buy ourselves out of this overnight, we also have a budget issue, and the deficit. I think we’re at the right spot for slowly getting healthy.

If you put all that together, we had a tremendous readiness problem. We also had over a 20-year hole in modernization. That’s what we’ve got to get out of, these two things. The military had cut 18 percent since 2010. Last year we plussed it up by 10 percent, so we bought back 60 percent of the reductions from the sequester, and now we’re trying to hold it even with inflation. You can’t just get out of the readiness hole or modernization hole overnight. Readiness is going to take another couple of years at this rate to be healthy. Modernization is going to take perhaps 10 years.

That’s what we’re dealing with right

now. We can’t buy ourselves out of this overnight, we also have a budget issue, and the deficit. I think we’re at the right spot for slowly getting healthy.

***iF:* SECRETARY MATTIS SAID THIS WEEK THAT THE WHITE HOUSE WAS GOING TO RESIST ANY EFFORT TO CUT THE DEFENSE BUDGET IN**

THE NEXT CYCLE. DO YOU THINK THAT WILL CARRY, OR DO YOU THINK THERE’S ENOUGH PRESSURE FROM CONGRESS TO START REDUCING AGAIN?

Rep. Bacon: My position is we can’t cut it. We have to stick with what we have plus inflation; that’s what will get us healthy on readiness and, over time, on modernization, which will take longer. I think it would be a mistake. I know Chairman [Mac] Thornberry wants to stay with the plan, budget plus inflation. To do otherwise will hurt readiness, or hurt modernization.

The problem is, I can't promise what the Democrat side will do on this. I think the new Chairman of the HASC [House Armed Services Committee] wants to reduce the top line. I think that's a mistake. Our job is to do our best to not let that happen. Thankfully we have the Senate.

iF: YOU MENTIONED MR. THORBERRY, WHO IS AN ADVOCATE OF SPACE COMMAND. HOW DO YOU FEEL ABOUT SPACE COMMAND, AND WHERE DOES IT FIT IN YOUR THINKING ABOUT MODERNIZATION?

Rep. Bacon: I support a Space Command-like model. To do a full separate service for space would be difficult, because there are only 20,000 space operators. The Marines are the next smallest service and they're 90 times bigger. It doesn't make sense to make a totally separate sixth service. We need to do something different for three reasons.

- First, Space is now a war fighting domain, so we need to be organized to win in that theater. We have to dominate that domain for ourselves and our allies to win a war, just like we have to do with air, sea, and ground, cyber and electronic magnetic spectrum.

- Second, we have duplicate acquisition lines that we need to consolidate. We shouldn't have four different space offices – we need to stop that.

- Third, and this goes back to the point about a war-fighting domain, we need a space war-fighting culture. I come from the Air Force, I love it, but it is still primarily a fighter pilot culture, and we have to do something in the Air Force to grow a space war-fighting culture, just like the fighter pilot. We have to get to where the Navy's where aviators, surface operators, and submariners have equal shot to be the CNO [Chief of Naval Operations]. You don't see that on the Air Force side; they have to evolve to where the Navy is.

What I would recommend is something like SOCOM [Special Operations Command]. SOCOM is a separate



Rep. Don Bacon.

combatant command with its own funding line and it has a lot of its own culture. We need to go that way with space command as well.

iF: I WANT TO TALK ABOUT CHINA YOU'VE SAID THAT UNDER SOME CIRCUMSTANCES, WE CAN HAVE A PRODUCTIVE RELATIONSHIP WITH CHINA. WHAT NEEDS TO HAPPEN TO GET THERE? HOW DO WE DEAL WITH CHINA AND THE SOUTH CHINA SEA? UNDER WHAT CONDITIONS CAN OUR RELATIONSHIP WITH CHINA IMPROVE?

Rep. Bacon: We do not want to be enemies with China. That would be bad for China and America, and the rest of the world. But China gets a vote in this, in how they respond to things like the

South China Sea and other areas of the world. They could be more helpful with North Korea as well. China has a vote, do they want to have a more cooperative relationship and a partnership? We have to engage, but we have to be alert to what is China doing. China can't just say the South China Sea is theirs. Philippines, Vietnam, Indonesia, Taiwan – our allies – have a voice in their part of the world and China can't see them as vassal states.

China has a bit of that culture that they see neighboring countries as being, or should be vassal states, but no, they're our allies. We want to protect that. We have to see how China responds. If they try to be good partners in the world, of course, they're going to be worried about their own priorities, and I understand that, but we'd like to see them embrace more of our values of human liberty, the

various freedoms that we protect especially freedom of religion. We see people of faith being persecuted, Muslims and Christians, right now. I hope China moderates to where we have a cooperative partnership, whether it's in trade or in how we work in the international arena. We have to see them do it in trade, too. They have barriers, they're stealing intellectual property, they have predatory economic policies of buying our businesses, taking the technology, and acquiring it. They're not fair business partners right now, and we can't let that continue without a reaction from us.

iF: THEN COMES THE QUESTION OF CYBER SPYING AND CYBER WARFARE. THE PENTAGON STILL BUYS COMPUTERS AND OTHER SYSTEMS FROM CHINA AND WITH CHINESE PARTS. WHY DO WE DO THAT?

Rep. Bacon: They should not be. I think we're moving away from it. We're very concerned that there could be backdoor software that will enable them into our systems. You can't buy an F-35 [fighter plane] and have Chinese-made computer chips in there. That's a recipe for disaster. So, we have to make sure that we have integrity in our computer systems and software on our military systems. There is a focus on making sure that we're buying, and I know this first hand. If we know things are from China we encourage folks in the National Security arena to buy from certain companies because we know that they check.

iF: COULD YOU IMAGINE A "BUY AMERICAN" POLICY?

Rep. Bacon: Yes, or "Buy Allied." I think particularly when it comes to software, computers, to do that from Russia or China makes no sense. I'll give you a related example. Our bases in Europe are using Russian energy right now, natural gas. It's a mistake because they can just turn off their gas and the bases are vulnerable. Precisely those

bases that we will need in a time of crisis – which will probably be with Russia. So we have to have a smarter policy. We should not be reliant on Russian gas in Europe for U.S. bases.

Another example, we know the Russians are in our energy grid. I don't know about the Chinese at this point, but the Russians are. So we have to be working to build a resilience in our energy grid.

China has a bit of that culture that they see neighboring countries as being, or should be vassal states, but no, they're our allies. We want to protect that.

iF: WHAT DO YOU MEAN "IN THE ENERGY GRID"?

Rep. Bacon: They want to have the ability to turn off certain sectors of our energy in a time of crisis, which would cause rolling blackouts. I can only say that now because the administration released that at an unclassified level but we've known it for a while. That goes for Russia, not China, but if the Russians are doing that the Chinese could possibly try to do the same thing. We should be buying smartly when it comes to our weapons systems.

iF: THE NEXT QUESTION WAS ACTUALLY ABOUT RUSSIA AND WHETHER RUSSIAN BEHAVIOR IN EUROPE MIGHT NECESSITATE LARGER BASES, MORE BASES, MORE SOLDIERS.

Rep. Bacon: If budget wasn't a concern, I would say yes, we need to have more presence in Europe. I would support what Poland's asking for, which is a NATO ground armored unit in their country. It would be smart because I think it is a deterrent. They're on the front lines with a revisionist Russia right now. I do think we need to expand the presence because we need to ensure that we have a strong deterrent. Having a presence in Poland

and the Baltics shows commitment to them, which improves deterrence.

iF: NOW WE HAVE A NEW SITUATION IN UKRAINE BETWEEN THE BLACK SEA AND THE AZOV SEA. THEY'RE NOT IN NATO. THEY'RE NOT AN ALLY AND THEY'RE NOT A TREATY PARTNER. WHAT ARE OUR CHOICES IN THE FACE OF RUSSIAN AGGRESSION?

Rep. Bacon: Russia actually made a terrible mistake in Ukraine. Ukraine had been a fifty-fifty country where they wanted to be in between alignment with Russia and the United States. Moscow attacking Crimea and taking it and the Donetsk region – the Russian-populated areas – Ukraine now is, I think, very strongly wedded to the West and the United States. You can guarantee that Ukraine will be very much more aligned with us from here on out. Russian policy is doing the opposite of what they wanted. If you ask me, it's a mistake.

I think for Ukraine, we're going to have to work with them to figure out what can we do with weapons and training to help them out. The previous administration was sending them MRE's [Meals Ready-to-Eat]. I thought we should be sending them anti-tank missiles and I supported the anti-tank missiles that this administration sent. I also think we should be working in other areas. It would be a mistake right now to talk about NATO because they're in a state of war with Russia, but we could surely help make them more proficient.

Russia had a treaty with Ukraine in which they pledged to honor their borders if Kiev gave up its nuclear weapons. Moscow has walked all over that treaty.



U.S. Army soldiers with the Joint Multinational Training Group conduct live fire exercises with their Ukrainian counterparts. (Photo: Army Staff Sgt. Elizabeth Tarr)

It's unacceptable. I think that that is our green light to do much more with Ukraine to support them.

iF: I'D LIKE TO RAISE IRAN AND NORTH KOREA. WE'VE TRIED TO MAKE INROADS WITH NORTH KOREA, MAYBE IN SOME WAYS WE HAVE. WHAT SHOULD WE DO?

Rep. Bacon: The president and the secretary of state did the right thing in meeting with Kim Jong Un. But in the end, we haven't seen tangible results, just a lot of talk. So, we should maintain sanctions on the regime until things change. On the other hand, the dialogue has lowered the temperature. That's good, because a year ago it was something else. I talked to General [Mark] Milley [Chairman of the Joint Chiefs of Staff], and it was scary to hear how close we were and really what a war with North Korea would entail. They have biological weapons, nerve agents, and on an unclassified level, an estimated 60 nuclear weapons. It would be ugly – an estimated million people, primarily civilians, killed in a war. So I'm glad the temperature has gone down.

But we have to realize they've not done anything tangible on their nuclear program. So we need to keep the sanctions on and not back off.

iF: AND IRAN?

Rep. Bacon: Iran is what scares me most. We haven't had a nuclear weapon drop in anger since 1945. If there is one in the next 10 or 15 years, the most likely scenario is with Iran. If they build nuclear weapons and add to their missile capability, Israel will not stand on the sidelines. Not with an Iran that's pledged to annihilate it.

We have to do everything in our power right now to stop Iran from acquiring nuclear weapons. I supported pulling out of the JCPOA [Joint Comprehensive Plan of Action, the "Iran deal"]. It was a mistake. The Obama administration gave \$100-150 billion to the world's largest exporter of terror and strengthened it based on a promise with a sunset clause that allowed it to become a recognized nuclear state in a decade. It was a mistake. We have not seen Iran back off at all, their terrorism,

their presence in Iraq, Syria, Lebanon, Yemen, you name it. It's a very scary place. Not immediately, but in 10 years I could see that being the world's biggest flashpoint.

iF: THEY'VE BEEN HAVING DEMONSTRATIONS FOR A YEAR NOW ALL ACROSS IRAN. DO YOU THINK THEY CAN CHANGE THEIR GOVERNMENT? I'M NOT SUGGESTING WE OVERTHROW IT.

Rep. Bacon: I don't know. Obviously, we would love to see that regime gone; the Iranian people deserve better. When you look at polling from Iran, they are the people in the region most favorably inclined toward the West, but they have the worst government – a theocracy based on Shiite extremism. It would be an answered prayer if their government was overthrown. But you're right, it has to come from the Iranians.

iF: DO WE SUPPORT THE IRANIAN PEOPLE? HOW DO WE LET THEM KNOW WE'RE ON THEIR SIDE?

Rep. Bacon: We do support them. I'm not too sure what the best policy is. We overthrew Saddam in Iraq and then we pulled the rug out from under the Shia down south. So we have to be careful about over-promising. We surely stand by them with moral support, information. I think we keep the economic clamps on Tehran so that we cut down on their trade. I just co-sponsored a bill today that will punish banks that do business with Iran, even in Europe. So we have to choke them and weaken them. But I know that often hurts the people, but in the end our goal, our hope is that the people do get rid of that government.

iF: BACK TO THE UNITED STATES. YOU'RE ON THE HOMELAND SECURITY COMMITTEE. WHAT WOULD YOU SAY KEEPS YOU UP AT NIGHT?

Rep. Bacon: The worst terrorist attack obviously was imported here from Afghanistan by al-Qaeda, which is why it's important that we not let the Taliban win in Afghanistan. We have to maintain a presence there, a minimal presence, to ensure that the Taliban doesn't take over. There is some terror that



(Photo: Jennifer Vinciguerra)

not people who wish harm on America; we're talking about a small minority. But they can do real damage. There are some who are radicalized through the Internet, or maybe it's an outlier mosque.

We have an outside threat and an inside threat. We know terrorists are trying to come here from the Middle East every day. Every day, they're somewhere in the pipeline. We have to talk

against people and trying to shut down free speech. They use the same techniques that they decry. They're a violent group, but I wouldn't call them a terrorist group yet. I just think they're repugnant.

This may be an aside, but I think in politics we need to be more respectful with each other. We can agreeably disagree, but what I hear right now is the other side of the aisle [Democrats] will typically call us fascist, Nazi, and it's wrong. Actually, it's not really an aside, because the Antifa movement plays into that. Both sides of our government, Republicans and Democrats, have to raise the bar – I'm talking more about the Democrats, but Republicans have to do the same thing. We have to be more respectful.

When you look at polling from Iran, they are the people in the region most favorably inclined toward the West, but they have the worst government – a theocracy based on Shite extremism.

can come from the outside – we have evidence of some Sudanese extremists trying to come through our southern border, through Brazil. We're working that. But day-to-day, the bigger threat is homegrown extremism. People become radicalized. Second generation people who are radicalized in ways their parents were not.

It's a minority, a small minority. We have always to clarify that, 99 percent are

about the ideology that does that and try to figure out how do we undermine the process of radicalization.

iF: WHAT ABOUT GROUPS LIKE ANTIFA? THAT'S NOT TERRORISM AS WE NORMALLY DEFINE IT.

Rep. Bacon: What concerns me is that they say they're anti-Nazi, but they use fascist techniques – threatening violence

iF: AS AN AIR FORCE VETERAN, CAN YOU ADDRESS PROVIDING THE CARE OUR VETERANS NEED WHEN WE'RE TALKING ABOUT BUDGET CUTS? HOW DO WE MAKE SURE THAT THEY GET WHAT THEY NEED, INCLUDING LONG-TERM CARE?

Rep. Bacon: We have to say up front, VA has had an increase in funding the last two years and it is one area that's

had bipartisan support on the Hill. And the doctors and nurses are committed individuals.

However, the bureaucracy is out of date. It shouldn't take months and months to pay a private doctor who sees a veteran under the Choice Act [rather

country as a whole is having. Cost. Costs are going up. I don't support a government takeover of healthcare, and we have to acknowledge that Obamacare has not worked; it doubled premiums, it's raised cost. I voted for AHCA [the American Health Care Act], to lower premiums,

have been rising every year, to the point where some ports can't function. They're actually having to raise the ports up.

Water levels are rising. Does that mean it's caused by human activity? There is probably a combination of inputs into this, but the point is the changes are having an impact. I just see it most readily when I talk to the Navy. They have to face the real-life challenge of keeping ports functioning when water levels rise every year.

More broadly, we're seeing the Arctic Ocean becoming more and more passable; fewer months filled in by ice. We're seeing some change now. I don't believe we know how much of that is man-made and how much of it is normal cycles, but there are changes and it's impacting the military as well.

I take a pragmatic view: our goal is to ensure that our air and water are cleaner than what we received when we started. That our kids are given a cleaner planet. That's my goal.

...our VA is suffering from a medical problem that our country as a whole is having. Cost.

than the vet going to a VA hospital]. It's not right. We're going to have to restore a functioning bureaucracy in the VA that knows how to pay bills on time, that does electronically transferable records. When I talk to our local VA, they're snail-mailing records and reports to Florida, and they have to wait for the papers to be mailed back. They're technologically in the 1950's and 60's.

I support choice for veterans, rather than making them go to VA facilities that are sometime far away or inconvenient. Choice will help them, but I'm pretty sure you have to pay the doctors on time.

But the fact also is that our VA is suffering from a medical problem that our

but we've got to find ways to reform and lower cost. What we're seeing with the VA is a symptom.

We can't just fix the VA. We have a medical problem in our country and we have to fix it.

iF: LAST QUESTION. YOU'RE A MEMBER OF THE BIPARTISAN HOUSE CLIMATE SOLUTION CAUCUS. CAN YOU TALK ABOUT THAT?

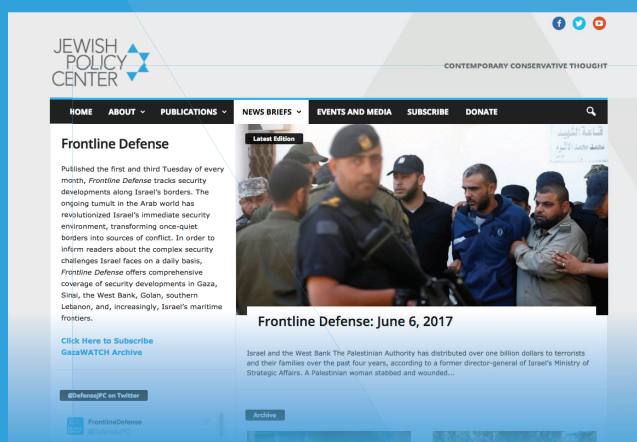
Rep. Bacon: I actually look at this in terms of our military operations. I was just down in Virginia Beach, at the ports where they were building aircraft carriers and subs. For decades, the water levels

iF: CONGRESSMAN BACON, ON BEHALF OF THE MEMBERS OF THE JEWISH POLICY CENTER AND THE READERS OF inFOCUS QUARTERLY, THANK YOU.

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Space Force: It's Time to Act

by Maj. Gen. THOMAS TAVERNEY, USAF (ret.)

"We are going to have the Air Force and we are going to have the Space Force."
—President Donald Trump, June 2018.

Space capabilities are a critical part of everything we do in the Defense Department. We could not effectively conduct military operations without space. Additionally, the commercial and civil world depends on capabilities from space; from navigation and timing to communications.

Today we do not have the focus, force structure, force posture, operating practices, or warfighting strategy to counter the current or emerging threats to our national interests in space. We do not have an organization with the authority, responsibility, budget, or even direction to assess solutions to these issues with the necessary singular focus.

■ **Weaponizing Space?**

Some of the rhetoric, often from non-space professionals, has been about space becoming a dangerous place in which to operate, not just for us, but for the commercial and civil markets across the entire world. The crux of some of these arguments is that a Space Force would militarize (use space for military purposes) and weaponize (put weapons in) space, thereby making space less safe and could result in wars in space.

The first time we armed a soldier or built a tank, did we militarize land? When we built and floated our first naval vessel, did we militarize the sea? When we built our first military aircraft, did we militarize air? I guess the answer is yes. We have always opted to provide the leadership of the country with the ability to defend ourselves in all domains, and to use those domains to the maximum advantage of our country, our international diplomacy, our allies, and our troops.

The reality is, as with other domains, space has already been militarized because we have used space to support our land, sea, and air forces. What we are doing in space is really no different. When we put a communications satellite in orbit and gave our soldiers, sailors, Marines, airmen, and Coast Guardsmen radios, space was militarized. When we got the GPS constellation on orbit and gave a soldier a GPS receiver, space was militarized.

So, the question is, did these actions cause space to become weaponized? And if it is weaponized, will it cause a war? We have proven over many years that the best way to avoid military conflict is to have a strong military with powerful capabilities. It is called "deterrence." This makes staring a war not a good decision for our adversaries and therefore keeps the peace. As President Ronald Reagan said, "Peace through strength."

While some may wish weaponizing space never occurred, the fact is that our adversaries get a vote, and have already voted to weaponize space. Russia and China both have demonstrated offensive space capabilities, along with the stated and demonstrated intent to use those capabilities. Addi-

The reality is, as with other domains, space has already been militarized because we have used space to support our land, sea, and air forces.

tionally, they are both building hypersonic weapons systems to put our nation and our people at risk. Our adversaries now pose a clear and present threat to our national security. If anything, the case for a strong defensive posture in space has strengthened.

■ **Arguments For and Against**

Some non-space experts view creation of a Space Force through the lens of creation of the Air Force over 70 years ago: that is, we have no need for a space force until we deliver offensive effects from space. The problem with this view is that it looks at the value and utility of the space medium through the lens of the air medium. All four mediums in which we operate (air, sea, land, and space) have their own utility, strengths, weaknesses, and challenges. Viewing the value of any of them through the perspective of any of the others does not do a service to the medium regarding its advantages and challenges.

We wouldn't want to assess the Air Force's value against its ability to occupy ground or separate combatants from non-combatants. As a nation, the Defense Department has done very well when our services have looked at the medium in which they operate in a focused fashion and with world-class experts and leaders in that medium. Space is unique and brings capabilities none of the other domains can contribute. Thus, the use of space systems should be ad-

dressed by space professionals steeped in the missions accomplished through, to, and from space.

Another issue is that a different military service would complicate interaction and communication within



Vice President Mike Pence, speaking at the Pentagon on the Space Force, called for an assistant secretary of defense for space. (Photo: U.S. Department of Defense.)

the Air Force between space and air elements. The truth is that the majority of support from space is to the Army, Navy, Marines, and Special Operations; all are bigger users than the Air Force. We already ensure space is fully integrated into the operations of the other services as well as the Air Force. Space is a domain that transcends regions, and can provide global reach.

■ Why Now?

The United States has been the clear dominant player in space for more than 25 years. Space has remained a safe and protected place, with amazing growth of a commercial space industry worldwide. Today, space is an international domain with more than 60 nations using it in a peaceful, unthreatened fashion. Unfortunately, the guarantee of operating freely in space no longer exists.

Congressman Jim Cooper (D-TN) said, "Some have argued that the U.S. taking a more belligerent approach to space could encourage a new arms race. But this notion is uninformed. Space is already a war-fighting domain. Pretending our satellites are safe right now is foolish."

While we have not been surprised

at the types of systems Russia and China have been pursuing, we have been surprised by the speed at which they have developed sophisticated space and hypersonic threats. They are rapidly implementing new technologies and their technology-based demonstrations challenge the assured availability of our space capabilities and threaten people and facilities on the ground.

Peers, near-peers, regional powers, and even non-state actors can now hold all or some of our space assets at risk and deny the United States freedom of passage through and operations in space. They also have developed technologies that threaten American assets on the ground. Hypersonic systems threaten our troops and U.S. facilities and equipment as well as our civilian population.

■ Drivers for Acquisition

1. We need to ensure the safety of current systems we fly in space – to support military operations, limit collateral and infrastructure damage, and support for international disaster relief. We need to ensure they can continue to support their missions, even while those systems potentially could come under attack from kinetic, electromagnetic, cyber, or

other threats. We are not in this game to only protect our satellites, but also to protect those men and women that need our space capabilities to successfully carry out their military and civilian missions.

2. Russia and China are developing anti-space capabilities. We need to ensure freedom of action in space (for peaceful purposes) for the United States, our allies, and the world so space commerce can continue unthreatened and unabated.

3. Additionally, Russia and China are developing hypersonic glide missile threats to the United States, our infrastructure, our people, and that of our allies and friends. We must defend ourselves against these threats. We need space-based systems to locate and track and counter these threats before they hit the United States or our allies.

4. We have been somewhat surprised at the progress Russia and China have made in these areas. We certainly knew they were pursuing hypersonic technology, but the speed at which they have done it has apparently been a surprise. We need to make it somebody's job to not be surprised.

5. Russia and China are advancing space technology faster than we currently are. They seem to be turning over technology in three to four years, while we are turning technology in seven to 12 years. While we remain the preeminent nation in space, and the leader in space technologies, it is clear it will not take many of their advancement cycles before we begin falling behind.

■ Why Pursue a Space Force?

Establishing a Space Force is not only about providing effects from space, it is about focus.

If your *raison d'être* is space, you wake up in the morning and go to bed at night thinking of space and only space. You develop people with a career of experience in space, but also with a strong set of warfighter experiences. Space professionals need to understand the

criticality of their systems to the warfighter and gain experience in how they are used. Implementing a Director of Space Forces in the area of responsibility is important, but we clearly need to build closer ties with all of the services and go forward with them to understand fully how space is being used, and be able to determine how it could be used. This will lead to better systems and support. Success in the terrestrial battlespace requires significant cross-domain employment of land, maritime, air and space in mutually supporting and supported relationships.

When the United States does this, instead of reacting to the problem of the day (and with the Air Force having three major missions there is always a problem, or two, of the day) you are able to think about the “what ifs.” What if our adversaries develop hypersonic and multi-burn weapons? What if our adversaries develop more robust antisatellite weapons? What do we do if a determined adversary takes out one of our satellites? What if our adversaries begin turning technology faster than we do? When you are busy solving an F-35 production issue there simply is not time for this type of thinking.

■ ***Creating the Right Force***

We simply cannot lose sight of the ultimate goal, capturing superiority in space so we can guarantee that our space capabilities are always available, that we advance technology as fast or faster than our adversaries, and that we assure the free and unfettered use of space by all.

The best argument against forming a Space Force is the cost; that it is better to spend our Defense Department dollars on equipment, systems, and training. This is certainly a valid argument. However, using the only number that currently exists (provided by Air Force Secretary Heather Wilson), the cost would be on the order of one half of one percent of the Defense Department budget. And, indeed there may even be ways to lower this estimated cost with a more efficient organization. While some

options may save money in the long run, every option would have a near-term cost; the question is how much is that near-term cost?

Creation of a completely separate service equivalent to the Air Force, Army, or Navy would create the greatest cost and bureaucratic disruption. A Corps or Guard may be less disruptive and costly, but still would come with a price tag. We should not create a big bureaucracy and the kind of footprint that would generate a new constellation of civilian leaders, under-secretaries, assistant secretaries, deputy assistant secretaries, their attendant staffs, and all the accompanying bureaucracy. We need to consider the value added of replicating things like basic training, service academies, recruiting, and so on, and what may be more cost-effective functions for the Defense Department to cross-utilize versus the value of a totally independent service.

The advantage of being able to take a fresh look is you can take advantage of modern information systems to do business in a more efficient and effective fashion and with fewer people. The proper alignment of authority and accountability will be critical. The Space Force does not have to be an onerously expensive organization. By exploiting instantaneous digital communications, we can design a much leaner organization with fewer levels of organization, shorter lines of communication, and more rapid, cleaner decision-making. We can create mission managers, combining operations and acquisitions within the same organization. In effect, we can disaggregate the organization and ensure that senior leadership gets and sees everything of use to it. No longer will decisions get staffed and manipulated by a cast of thousands.

However, we need to be vigilant: as Gen. Bernard Schriever observed, the procedures that the Western Development Division created to expedite acquisition and deployment of the first ICBMs and spacecraft devolved during

the 1960s into a bureaucratic web that bogged down the acquisition process. How do we put in place safeguards against a similar devolution in the future, without affecting efficiency, speed, and effectiveness, and while including intelligent, focused oversight? Commercial space and early space developments provide a clue by co-locating smart engineers with authority and responsibility onto the developers’ site.

Probably the key recommendation from Vice President Mike Pence’s speech in August was a call to establish an Assistant Secretary of Defense for Space to drive and organize this transition – someone steeped in space and all of the elements of launch, on-orbit operations, command-and-control, and acquisition. This person also needs to have a predilection for out-of-the-box thinking and change; be committed to doing this with a very small staff; committed to total accessibility; and have the necessary authority and accountability.

Most importantly, this startup leader needs to commit to the first six months, then get off the stage and let the process pick a qualified secretary unburdened by the inevitable broken glass of setting up a new organization. The skills to start a new organization and the skills to be a secretary differ substantially. With a lean organization of similarly qualified people, this office must lead this transition, with some likely reluctant partners.

■ ***Conclusion***

The commander-in-chief has spoken, and the time to debate is over. It is time to determine the best and most cost-effective organizational alignment to get the job done, present recommendations to the White House and Congress, and let them do their jobs.

Maj. Gen. THOMAS TAVERNEY, USAF (ret.) is a former vice commander of Air Force Space Command. A version of this article appeared in The Space Review.

Afghanistan: How Much Longer, To What End?

by JAMES DURSO

(Editor's Note: American forces have spent 17 years, costly in lives and money, fighting in Afghanistan. The following article, intended to stimulate strategic re-examination of our involvement, focuses on accountability for achieving objectives and posits an unusual "exit strategy.")

General Electric Co. fired its chief executive officer, John Flannery, after 12 months because "the board had grown frustrated with the slow pace of change." American taxpayers know exactly how the GE board felt whenever they see another headline about Afghanistan.

In September 2018, the United States had been in Afghanistan for 17 years and there was no end in sight. The CIA, the spearhead of U.S. forces, reached Afghanistan's Panjshir Valley on Sept. 26, 2001 just more than two weeks after al-Qaeda's 9/11 attacks in New York City and Washington, D.C. Military special operations forces arrived shortly after, and the combined CIA-military team connected with the Northern Alliance to rout the Taliban and liberate Kabul by mid-November.

Maybe we should have quit while we were ahead: the tab so far is \$840 billion for military operations, \$126 billion for reconstruction, probably another \$1 trillion for veterans' health care and more than 2,200 American killed and 20,000 wounded. The annual cost is \$50 billion, more than the defense budget of the United Kingdom.

On Sept. 2, 2018, Gen. Scott Miller assumed command of the NATO forces in Afghanistan. Since January 2002, the

NATO command in its various guises has had 16 commanders, Americans commanding exclusively since 2007.

President Donald Trump isn't comfortable with the extended mission in Afghanistan. He wants to win, but probably doesn't see a way out, primarily because most of his advisors don't know any means other than "money and time." So, in August, he authorized an additional 4,000 troops for training and counter-terrorism missions.

American taxpayers were indulgent for the first decade of the Afghanistan project, but President Barack Obama gave notice the tide had turned when he suggested America pursue "nation building here at home." President Trump

training, improvised explosive device (IED) attacks, or number of people displaced by the fighting, we've got you covered. Adding to the confusion, competing assessments by the Department of Defense, the Special Inspector General for Afghan Reconstruction (SIGAR), and the Lead Inspector General for Overseas Contingency Operations disagree on the meaning of trends.

How can the president measure the leaders' success or failure? By looking at the amount of territory the Afghan central government controls or influences, currently under 60 percent of the country? Or looking at the level of opium production? According to the latest report by the U.N. Office on Drugs and

After almost two inconclusive decades there's no shame in allowing domestic political considerations to drive Afghanistan policy.

pithily seconded that when he asked, "What the f**k are we doing there?"

Maybe it's time Trump gave his top three officials in country, the ambassador, the commander of NATO's Operation Resolute Support, and the USAIS Mission Director 12 months to show demonstrable progress. But how will he determine success?

The war has spawned a flood of measurements that tell us more and more about how we're "not winning" in the words of Defense Secretary James Mattis. If you want to measure days of

Crime "opium production in Afghanistan increased by 87 percent to a record level of 9,000 metric tons in 2017 compared with 2016 levels."

Up to now, the senior leaders, diplomats, generals, and reconstruction officials worked as if they had no deadline, which in the trade is known as "conditions-based." Instead, the leaders should be given a deadline and promise of no micromanaging by Washington. There's a lot going on beneath the surface of those metrics because they really measure the provision of public safety

in Afghanistan's ungoverned spaces, so the leaders should have a free hand to do what they must to succeed.

Twelve months will keep the NATO forces in place through the next Afghan presidential election on April 20, 2019. And speaking of presidential elections,

government control of the countryside and increasing illegal opium production. In questioning the purposes of the continued U.S. military presence in Afghanistan, President Trump was channeling many Americans.

In parallel with the 4,000 troop in-

Ghani's opponents in the Coalition for the Salvation of Afghanistan may hand Trump an opportunity to break out.

The Coalition, an assembly of the minority Tajiks, Uzbeks, and Hazara, with Pashtun leadership, will be a serious challenge to Ghani in next April's vote, and it may try to invalidate the October 2018 parliamentary election and call a traditional Loya Jirga to unseat Ghani. If the Coalition uses the extra-legal Loya Jirga to oust Ghani, Trump would have the justification he needs to go to the American people with a decision to quit and cut America's considerable losses, especially if he is bolstered by a pessimistic National Intelligence Estimate.

So now comes Erik Prince, the man everyone loves to hate, with a plan to privatize and streamline the tasks now being performed by about 14,000 American and 8,000 NATO troops and over 26,000 contractors. Prince earned his notoriety in Iraq when his security company, Blackwater Worldwide, was involved in a shooting incident at Baghdad's Nisour Square that left 17 innocent bystanders dead and caused Blackwater's expulsion from the country. Prince, in his defense, claims he never lost a client which, if you were protected by his teams, is probably the most significant criterion.

Prince proposes to replace the NATO forces and their support contractors with 6,000 contractors, all special

U.S. diplomats have started direct talks with the Taliban while reiterating that the end to the conflict will only come through an intra-Afghan settlement.

the 2020 vote in the U.S. is on Nov. 3, 2020, so a 12-month performance period for the three leaders will give the Republican candidates one year to campaign without having to promise progress in Afghanistan if there is none to be had. After almost two inconclusive decades there's no shame in allowing domestic political considerations to drive Afghanistan policy. In fact, it's about time.

And facile assurances, like from Afghanistan's Chief Executive Abdullah Abdullah that it "won't be a 50-year engagement," indicate some of that country's leaders don't understand most Americans think it's unlikely the United States will prevail, whether the strategy is dressed up as "time-based" or "conditions-based." They need the motivation the ticking clock provides, and the understanding that this may be the end of their claim on America's attention.

crease authorized by President Trump, the administration slashed assistance to Pakistan, the state sponsor of the Taliban. This won't change Pakistan's behavior in Afghanistan, but at least America won't continue to insult itself by funding its enemy.

U.S. diplomats have started direct talks with the Taliban while reiterating that the end to the conflict will only come through an intra-Afghan settlement. At the same time, Uzbekistan's diplomats hosted talks with Taliban representatives as part of Tashkent's initiative to include Afghanistan in Central Asia, and to give the Taliban an interlocuter other than Pakistan.

Trump's pro-intervention advisors probably want to block him from deciding to withdraw and upsetting

Prince proposes to replace the NATO forces and their support contractors with 6,000 contractors...

■ *Plan Illuminates Current Short-comings*

In August 2018, U.S. Defense Secretary James Mattis kiboshed Erik Prince's plan to privatize the war in Afghanistan. Prince called the fighting "an expensive disaster for America." But we may not have seen the last of the Prince plan, which is forthrightly titled "An Exit Strategy for Afghanistan."

Despite the cost in dollars and lives, there hasn't been much progress, as noted above in figures on central

next spring's Afghan presidential election. Twice-postponed parliamentary elections were held successfully in late October. Retaining U.S. forces through the Afghan presidential balloting would give the new NATO commander time to make progress (known as "calendar creep"). But Afghan President Ashraf

operations veterans, and 2,000 U.S. special operations troops, who will provide QA for the contractors and unilateral direct-action capability. The mentor-contractors will stay with their assigned Afghan National Army battalions for a minimum of three years. Two-thousand contractors will operate aircraft for



Soldiers from A Company, 101st Division Special Troop Battalion air assault into a village inside Jowlzak valley, Parwan province, Afghanistan. (Photo: U.S. Army)

medical evacuation and close air support and will staff two Western-style combat surgical hospitals that would also treat wounded Afghan soldiers. The contractors and U.S. forces would be subject to the Uniform Code of Military Justice and Afghan law, and contractor medical care would be provided by Defense Base Act insurance, which is current practice for contingency contracts.

The plan includes a governance support unit that will provide logistics to the force and, very importantly, prevent payment to Afghanistan's "ghost soldiers" and the skimming of soldiers' pay by their commanders, perennial corruption problems in Afghanistan's military.

The most remarked upon feature of the plan was Prince's suggestion that the effort be led by a "viceroy" who would answer directly to the president and command all military, diplomatic, and intelligence assets in Afghanistan. This is known as "unity of command," and has never existed in America's long project in Afghanistan. That person would need

experience with the military and intelligence agencies, but no candidate may satisfy all the bureaucracies so the president (and Congress) will have to back it up by giving the viceroy hire-and-fire authority and control of the budgets.

Another noted feature was contracting the effort under Title 50 of the United States Code which is the authority for the security services, such as the Central Intelligence Agency (CIA), but also for most military operations. This may expedite the contract award process, but particular attention will be required for "contract administration," that is, ensuring the vendor completes the terms and conditions of the contract. As the military, the diplomats, and the reconstruction officials have been unable to define "success" in Afghanistan, the contracting officer and the vendor may be left to their own devices.

And using contractors has one big benefit for a government: their deaths are pretty much off the radar, especially if they aren't American (and a share of

Prince's force will be non-American). News media report the death of every deployed military member, even if he or she dies in a vehicle accident on base, but dead contractors go unnoticed. Two hundred and fifty-seven American contractors died in Iraq from 2003 to 2011 but received far less attention than fatalities among soldiers they supported.

The opportunity to mine Afghanistan's trove of rare earth elements was highlighted in Prince's plan, which immediately drew accusations of plunder. There is wealth to be had: Russian, British, and American geologists have found that Afghanistan has enormous untapped mineral resources, possibly valued at \$3 trillion.

The minerals are there, but there's no way to mine them, so they're effectively worthless. And there's no way to get them out because the country is violent and corrupt, which scares away investors. Outsourcing may be the last chance to recover Afghanistan's mineral wealth for its people. It will also chip

away at China's control of a significant share of the world's rare earths.

Meanwhile, Afghanistan's government has some concerns the United States must address:

- Is the plan legal under international law?
- Will using foreign contractors encourage local warlords to circumvent the newly-formed democratic institutions in the country?
- Who will be accountable for the success or failure of outsourcing a military campaign?
- How will the government of Afghanistan provide oversight of military operations on its territory?
- Will outsourcing be seen as a for-profit corporation taking control of the conflict and selling war as a product, dooming prospects for peace and reconciliation in the country?

The regional powers, China and Russia, and the active neighbors such as Pakistan and Uzbekistan, may stop their support of the peace process if they interpret outsourcing as indicative of waning U.S. interest.

Criticism of Prince's plan runs up against the ticking clock that is close to chiming "20 years" so Trump may soon run out of patience and present Kabul (and U.S. officials) with a "take it or



Defense Secretary James Mattis conducts an all call with the men and women of Bagram Airfield, Afghanistan. (Photo: U.S. Air Force)

Detractors of a new approach may say the sacrifice of our GIs will be dishonored by resorting to "mercenaries," but the sunk cost of the dollars, dead, and wounded shouldn't stop us from examining alternatives after 17 years fighting a war we are "not winning" according to Sec. Mattis.

Prince has suggested a "test drive" of his proposal which would see contractor deployments to Nangarhar and

also consider Afghan concerns.

Prince's plan gives the United States an opportunity to try a new strategy in Afghanistan instead of spending another year while yet another new NATO commander gets acquainted with his job. It may prompt Washington to consider three options: Prince's original plan, an Afghan Ring Road reconstruction plan suggested by Gary Anderson, which could strengthen the country's general infrastructure and commercial integration with Central Asian neighbors, or the "decent interval" option, providing mentoring and training to the Afghan army so, if worse comes to worst, the United States will be several years removed from a Taliban takeover.

There's no U.S. political constituency for continued loitering in Afghanistan and Trump won't lose any votes in 2020 if he says he gave it his best shot...

leave it" proposal. There's no U.S. political constituency for continued loitering in Afghanistan and Trump won't lose any votes in 2020 if he says he gave it his best shot but getting out now is right for America. Secretary Mattis is concerned that outsourcing may make NATO allies in our Afghan coalition jump ship, but how many American lives and dollars should we pay for Latvia's 37 troops?

Helmand provinces. Nangarhar is an egress route to and from safe havens in Pakistani, and Helmand is the Taliban's financial center of gravity where one-third of the arable land is used for poppy cultivation. That would provide Washington some interesting lessons learned whatever the outcome but, given resistance inside the U.S. government, it will require an impartial evaluator who will

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Threats and Strategic Foresight

by LANI KASS

All strategic planning is based on a set of assumptions. Surprise occurs when core assumptions are proven wrong.

History is replete with examples of militaries that failed due to their inability to transform organizations and culture, adopt new operational concepts, or leverage breakthrough technologies. But militaries do not fail by themselves. Failure occurs in the context of an overall national debacle caused by systemic problems that fall into three distinct but related categories:

- *Failure to Anticipate* the nature of and trends within the strategic environment; the character and resilience of the opponent; one's own will and resolve; the impact of technology – be it new or old but used in new ways; and, perhaps most importantly, failure to anticipate the second- and third-order consequences of both action and inaction.

- *Failure to Learn* from experience – both our own and others'. Selective reading of history – especially when coupled with faulty analysis – is particularly pernicious here, as is mistaking “lessons recorded” with lessons absorbed and actually learned.

- *Failure to Adapt* behaviors, concepts and institutional constructs to the ever changing domestic and international dynamics; evolving adversarial operational, tactical, technological, and/or doctrinal innovations. Failure to validate pivotal assumptions and adjust accordingly falls in this category as well.

History is replete with examples of disasters born of lack of strategic foresight: The American Army after the Civil War – arguably the most experienced on the planet – spent 30 years fighting the

Indians only to struggle to deploy a brigade 80 miles off the coast of Florida – against Spain in Cuba. Likewise, Britain and France post-1815 let their conventional power fade – while their hubris blossomed – resulting in a blood bath in the Crimean War and near-existential disasters in the two World Wars that followed. In the wake of their spectacular victory in June 1967, the Israel Defense Forces (IDF) rested on its laurels, ceased innovating, and focused on policing the newly acquired territories and fighting terrorism, secure in the soon-to-be-proven fallacy that past successes and strategic depth would deter any future

resounding success – perceived as such by friend and foe alike – will be magnified in the interconnected global village and feed the narrative of America as “the giant with feet of clay.”

We must balance current exigencies with future requirements. Any single-focus approach bears a huge opportunity cost. The rest of the world has not taken a time out while we tended to Iraq and Afghanistan. To the contrary, it exploited our focus on the lower end of the conflict spectrum to the point of leapfrogging areas where the United States effectively took its dominance for granted. Consequently, future conflicts

...aggressors tend to assume risks that seem irrational
– and, thus, improbable – to the intended victim.

conventional threat. Six short years later, in October 1973, Israel was fighting for its very survival, having fallen victim to strategic surprise masterfully orchestrated by the seemingly defeated foe.

The implications are clear: First, aggressors tend to assume risks that seem irrational – and, thus, improbable – to the intended victim. This leads to strategic dislocation – and, potentially, catastrophic failure. Second, reputation and credibility born of past successes might not suffice as a deterrent. Third, reneging on commitments undermines credibility, potentially causing long-term damage to global stature and influence. Specifically, for a great power like the United States, there is no such thing as “minor setback.” Anything less than a

will be more costly, violent, and difficult to control. The potential for strategic surprise is high, and our military's residual capacity is at a historic low. Concepts and institutional structures, valid for a specific time and place, should not be allowed to become dogma. That too is a prescription for failure.

A compelling description of what failure might look like is as important as a crisp articulation of the desired end-state. The latter describes how we WANT the situation to be after the mission is accomplished. The former lays out the UNDESIRABLE alternative – the consequences of a mission left undone. Yet, imagining failure is simply not in our DNA. Indeed, it isn't in ANY nation's DNA. Consider the following

truism: the only certain thing about war is that one side will lose. Yet, since time immemorial, nations and armed groups have gone to war with nothing but a picture of victory imprinted in their minds – secure in the belief that God and jus-

deterrence and conceive new ways to deal with asymmetric actors who might have been deemed “undeterrable” in the Cold War construct.

Strategic risk can also mount through the accumulation of shortfalls

What prevents ... course correction are systemic deficiencies, wishful thinking, as well as the inherent human ability to adjust to a “new normal” – the shifting baseline of what is deemed acceptable.

tice were on their side. Saying that “failure is not an option” is, thus, nothing but an exhortation. In truth, failure is an ever-present – though obviously adverse—possibility.

Debacles-in-the-making develop over time, usually with plenty of opportunities to notice and correct the downward spiral. What prevents that course correction are systemic deficiencies, wishful thinking, as well as the inherent human ability to adjust to a “new normal” – the shifting baseline of what is deemed acceptable.

At its core, the inability to conceive anything but a resounding success is a failure of the imagination. It is also a natural defense mechanism. Humans tend to repress or explain away the ever-present potential for failure. Bad experiences are particularly tempting to forget. Yet imagining what failure might look like is a necessary step in laying out the foundation for success.

For a nation whose security is predicated on an enduring strategy of dissuasion and deterrence, the most fundamental risk is failure of deterrence. Deterrence is a function of capability, will, and credibility and, thus, exists in the eye of the beholder. Its success – or failure – is measured only in the breach. We also need to evolve new deterrence concepts. In particular, it behooves us to rethink concepts such as extended

in recapitalization and modernization, stale strategic concepts, failure to revitalize organizational ethos, and unwillingness to let go of outdated structures, bureaucratic arrangements, sector boundaries, and hierarchical relationships. America’s global posture and future success depend upon the ability of our people and organizations to adopt new, relevant concepts, constructs and technologies, suitable to the dynamics of the strategic environment.

The United States is at an historic inflection point demanding an equally comprehensive revolution. The future strategic environment will be shaped by the interaction of globalization, economic disparities and competition for resources; diffusion of technology and information networks whose very nature allows unprecedented ability to harm and, potentially, paralyze advanced nations; and systemic upheavals impacting state and non-state actors and, thereby, international institutions and the world order. The following are salient features of this increasingly complex, dynamic, lethal, and uncertain environment:

- Rising peer competitors with voracious appetites for resources and influence;
- Predatory and unpredictable regional actors;
- Violent extremism and ethnic strife – a global, generational, ideological struggle;

- Proliferation of weapons of mass destruction and empowering technologies;
- Increasing lethality and risk of intrusion by terrorist and criminal organizations;
- Systemic instability in key regions (political, economic, social, ideological);
- Unprecedented velocity of technological change and military adaptation;
- Availability of advanced weapons in a burgeoning global marketplace;
- Exponential growth in volume, exchange, and access to information;
- Greatly reduced ability to retain high-level national security secrets;
- Extremely rapid decay rates for any domain advantage;
- Surging globalization, interconnectivity and competition for scarce resources; and
- Dislocating climate, environmental, and demographic trends.

These global dynamics are closely intertwined with the changing character of 21st century warfare. Having experienced – or vicariously learned – the cost of challenging the United States head-on, would-be adversaries are developing asymmetric approaches to attack vital levers of U.S. power. Their strategies seek to circumvent our core advantages, while undermining international support and domestic resolve.

Our military’s unprecedented lethality and effectiveness deter opponents from massing on the battlefield, driving them to adopt distributed and dispersed operations. They find maneuver space and sanctuary in dense urban areas, ungoverned hinterlands and loosely regulated information and social networks.

Meanwhile, ascendant powers are posturing to contest U.S. superiority, translating lessons from recent conflicts into new concepts, capabilities and doctrines tailored to counter U.S. strengths and exploit vulnerabilities. Specifically:

- Anti-access/Area-denial weapons and operational concepts designed to limit our freedom of action and power projection capability;
- “Generation 4-plus” aircraft that

challenge America's existing inventory and, potentially, air superiority;

- Increasingly lethal, integrated air defense systems (IADS) that could negate weapons and tactics used to suppress or destroy these systems;

- Proliferation of surface-to-surface missiles with growing range, precision, mobility, and maneuverability—capable of delivering both conventional and non-conventional payloads;

- Proliferation of unmanned aerial systems (UAS) capable of conducting low observable, persistent, intrusive missions in both lethal and non-lethal modes;

- Resurgence of offensive counter-space capabilities;

- Increasing ability of even marginal actors to observe the disposition of U.S. assets through widely-available, inexpensive commercial means; and

- Attacks through cyberspace are creating tactical, operational and strategic effects at low cost and with relative impunity.

Consequently, the United States and its allies face an unprecedentedly varied array of threats, ranging from existential to potentially crippling perils.

■ **Existential Threats**

Existential threats are risks to America's way of life as a Western, democratic society with a functioning economy, governance, public services and infrastructure. While most existential threats occur suddenly, an overwhelming migration of alien culture beyond our ability to absorb and socialize to our way of life could cause an existential threat over time.

Such existential threats to our way of life must be distinguished from crippling threats which severely affect either a segment of society, a geographic region, or an isolated portion of the country's infrastructure. A crippling threat is recoverable, although the recovery could be long and painful. A synchronized series of crippling threats could become existential, if we fail to regain decision superiority, respond properly and break

the chain of cascading effects.

Even if we continue successfully to dissuade and deter major competitors, their advanced equipment is proliferating worldwide. We are bound to confront these systems wherever America engages to promote and defend its in-

terests. We must also be vigilant for adversary breakthroughs in fields such as cybernetics, nanotechnology, biotechnology, electromagnetic spectrum physics, robotics, advanced propulsion, etc. We cannot assume that the next military revolution will originate in the West. Therefore, we must anticipate innovative combinations of traditional and new concepts, doctrines, weapons systems, and disruptive technologies.

■ **At a Strategic Crossroads**

As a consequence of these global dynamics, we are at a strategic crossroads. From this point forward, the United States should expect to be asymmetrically challenged in ALL domains. Perhaps for the first time in history, the ability to inflict damage and cause strategic dislocation is no longer directly proportional to capital investment, superior motivation and training, or technological prowess. Asymmetry is the order of the day. And, all too often, America finds itself on the wrong side of the cost-imposition curve.

Our non-negotiable commitment is to provide forces proficient across the full range of military operations to protect the United States, its interests, values and allies; deter conflict and prevent surprise; and, should deterrence fail, prevail against any adversary. We must enhance our own asymmetric advantage by delivering global surveillance, global command and control, and the requisite speed, range, precision, persistence, and

payload to strike any target, anywhere, anytime, in and through any domain. Joint and Combined Force Commanders must retain the ability to safeguard the homeland, assure allies, dissuade opponents, and inflict strategic dislocation and paralysis on adversaries.

...the U.S. should expect to be asymmetrically challenged in ALL domains...

America's strategic partnerships are more important than ever. We must strengthen and broaden coalitions, attending to interoperability between allies and partners. Building these relationships is both an engine of progress and prosperity, as well as a potent instrument of America's diplomacy in an increasingly interconnected world.

We must formulate innovative concepts to anticipate, adapt to, and overcome symmetric and asymmetric challenges. We must also accelerate the deployment of evolutionary and disruptive technologies, as we address the urgent need to recapitalize and modernize.

Our shared touchstone of the noble virtues enshrined in the Constitution and a single, unifying purpose "to provide for the common defense" must remain unchanged. We will have neither the buffer of time nor the barrier of oceans in future conflicts. The character, tempo and velocity of modern warfare already severely test our ability to adapt. Therefore, redefining the interagency and the private-public relationship is an urgent national security requirement – not a luxury we can defer. Rising to this challenge is not a choice: It is our shared responsibility and a national imperative.

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Prospect for Artificial Intelligence in Taiwan's Defense

by YISUO TZENG

Artificial Intelligence (AI) is by no means new, but after decades of lukewarm development, it has re-emerged and has been a buzzword around the globe since 2016, particularly in defense circles. The American organization The Center for Strategic and Budgetary Assessments (CSBA) in its 2018 report on human-machine teaming for future ground forces portrays future military command and control working across multiple domains with multiple partners while con-

and regardless of the big talk, none of this is going to happen automatically. How well AI works in military operations ultimately depends on how hard the defense planners and industries “walk the walk.” And there is no such thing as low-hanging fruit in AI development. One may find primitive AI in daily life, for example with iOS Siri (Speech Interpretation and Recognition Interface) as a case of natural language processing (NLP) in point. But it took years to make machine learning advance to an acceptable level.

daunting, if not insurmountable, challenge in the way of machine learning.

Beyond the problems of quality data collection and accumulation, there exist algorithmic biases and AI ethical issues. It comes as no surprise that algorithms are biased if AI has to pass the 1950 “Turing Test” [Ed. developed by Alan Turing to test a machine’s ability to exhibit intelligent behavior equivalent to or indistinguishable from human thinking]. Human beings are by no means value-free. An often-cited example is AI-powered decision-making for an autonomous vehicle that encounters the classic textbook ethical dilemma: should an autonomous vehicle be taught to shy away from a group of children if it means hitting an individual adult? This involves not just the number of casualties but also the priority of children as opposed to adults.

Similar difficulties are likely to occur when AI is applied to autonomous weapons’ target selection. Despite the rhetoric regarding omniscient, AI-powered, hyper-powerful automated/autonomous weaponry that can do what prior efforts could only dream of, a check on the current state of AI embedded in de-

...AI is not almighty but rather assisted intelligence most of the time...

sidering multiple options. AI will have to be embedded in the design to tackle complex decision-making in order to process and recommend options faster and better than human cognition.

In the meantime, heated debates over the weaponization of AI-enabled autonomous technologies came to the fore at such United Nations fora as the Conventions on Certain Conventional Weapons (CCW), as well as the UN Institute for Disarmament Research (UNIDIR). News regarding AI-enabled weapons research and development often hits the headlines, from F-35 fighters with AI-assisted ICT platforms, to AI-powered unmanned aerial vehicles (UAV) in swarming attacks, to AI-generated cyberattacks and information warfare.

But that by no means indicates a mature AI applicable to defense systems,

■ Problems on the Way

There are more problems than meet the eye in creating AI that works. While it is true that what takes years for a human to accomplish is likely to be done in hours with the help of AI, it is no easy task to come up with the cross-domain, knowledge-backed algorithms and to

grab big data that together make possible the big data analytics, edge computation, and deep learning a preliminary stage of AI. Today, the absence of sufficient data needed in the construction of the quality analytics constitutes a

defense development says otherwise. According to a 2018 Center for Strategic and International Studies (CSIS) report on AI and national security, “...it is difficult to immediately identify where AI is being applied. The narrative of ‘waiting

...an open environment contains daunting challenges for unmanned platforms equipped with AI.



Taiwan's Ministry of National Defense showcases its Medium Altitude Long Endurance (MALE) UAV at Aeronautical Systems Research Division (ASRD), a branch of the National Chung-Shan Institute of Science and Technology (NCSIST). (Photo: J. Michael Cole)

for AI' is more prevalent in national security, particularly within the DoD and the intelligence community."

AI is not almighty, but rather assisted intelligence most of the time, with the rise of augmented intelligence as the upshot. Autonomous intelligence waits to be developed for future applications. With that limitation, AI application on autonomous weapons or unmanned vehicles turns out to be neither autonomous nor really unmanned. Unlike machine learning placed in closed or semi-closed environments, an open environment contains daunting challenges for unmanned platforms equipped with AI. In defense, AI mainly reaches the level of automated systems, human-in-the-loop weapons rather than autonomous intelligence, human-out-of-the-loop weapons. A salient case in point is the UAV, which remains human-in-the-loop automation with a satellite transmitting control signals from a remote-control station to the UAV as well as the UAV's sensor data to a

remote-control station, thereby supporting the controllers who make the call.

■ Taiwan Needs AI

With the basics of the state of AI in defense in mind, we turn to Taiwan. In the face of growing military threats from China, a nuclear-free Taiwan with a decreasing youth population has no options but to embrace asymmetric warfare. The UAV rises to the top of the development list for Taiwan's Ministry of National Defense (MND). Paying close attention to American, Chinese, and European military technology developments, Taiwan's MND considers the UAV and autonomous technologies a good fit for Taiwan's defense strategy: holding a fortified defensive posture with multi-layered deterrence, particularly tailored to Taiwan's downsized force and tight procurement budget allocations.

Considering China's offensive options, large-sized UAVs with high endurance performance and payload capacity

may exercise multiple wartime missions in countering China's assembly of an amphibious landing fleet, compromising the enemy's strategic and tactical targets, reducing wartime loading for the fighter jets, and finally, acting as decoys to consume the enemy's air-defense missiles. Moreover, under an enemy attack upon Taiwan's military air bases and runways, the island's average roads are just fine for a UAV takeoff, making UAVs easy to deploy and hard to find.

The UAV is also a good payload platform for Taiwan's current weaponry. With air-to-surface AGM Hellfire and other such precision weapon systems as anti-ship cruise missiles as well as a submunition dispenser, UAVs may initiate counterattacks on the enemy's battle ships, harbors, airports, and missile batteries in an attempt to deter or delay enemy operations and complicate the enemy's military scenarios. In addition to counterattacks, UAVs could be handy in the defense of Taiwan's offshore islands.

At present, Taiwan's MND has placed stand-off weapon systems, including air defense and anti-ship missiles, on various offshore islands. The UAV fleet could be a good option with aforementioned warfighting capabilities in mind.

During both peacetime and wartime, automated or autonomous platforms either on the ground (unmanned ground vehicles, UGV) or in the air (UAV) are only good news for Taiwan's armed forces facing low fertility in the general population and a tough market for voluntary force recruitment. Taiwan's logistics troops would benefit most from the use of UGVs to carry ammunition and other heavy cargo. A data-linked UAV with an endurance of up to 20 hours of air patrol could lift much of the load for Taiwan's airborne early warning aircraft fleet.

■ Taiwan's AI Development

Taiwan's MND has no intention of being savvy on automation while overlooking the opportunity to take advantage of Taiwan's industrial edge on smart technology development. Taiwan's indigenous AI-assisted logistics, quality control apparatus, artillery target acquisition, and computation might be well on their way to improving performance and efficiency while compensating the shortage of troop forces in combat and logistics units.

Taiwan's big data analytics and cloud computing has been pacing side-by-side with the deployment of smart city buildup and smart manufacturing embedded with the Internet of Things (IoT). Looking back on high-tech industrial development in Taiwan, the government and private sectors are, for most part, followers and late-comers. Chasing civilian technology transfer and carving benefits from the pie of Original Equipment Manufacturers or Original Design Manufacturers (OEM or ODM) seems to be the biggest game in town for Taiwan's positioning in the global value chain.

AI is a bit of a different story owing in large part to Taiwan's determination to move beyond its comfort zone

with regard to development. Taiwan has embarked on an inter-agency approach to bring together the Minister without Portfolio in charge of economic development, the Ministry of Science and Technology (MoST), and the Ministry of Economic Affairs (MoEA), to work together in AI R&D, applications, and

...mini-UAV could even initiate swarm attacks if AI is applied to empower the algorithms driving the attacks.

industrial ecosystem buildup. Today, AI does not just create news headlines, but it also takes the lead on a large proportion of the research projects sponsored by MoST. Many, if not all, enterprise project managers seeking MoEA funding also find AI a necessary element in their project proposals.

Taiwan's MND is keen to seize opportunities to find applicable AI-related projects likely to advance the performance of its weaponry and decision-making systems. According to the suggestions proposed by a newly published 2018 Annual Defense Technology Trend Analysis Report (of which this author is the co-editor and a chapter contributor) of the Institute for National Defense and Security Research (INDSR), a defense think tank fully sponsored by Taiwan's MND, UAVs and UGVs ought to be focal points for Taiwan's asymmetric warfare-oriented weaponry procurement.

UAVs could be of use in reconnaissance and air-to-surface assaults. In addition, mini-UAVs could even initiate swarm attacks if AI is applied to empower the algorithms driving the attacks. Other AI-powered weaponry proposed by the INDSR includes cybersecurity intrusion detection, cyber threat identification, disinformation/hate speech/information warfare – all of which are under development by technology institutions in Taiwan. Moreover, the INDSR also proposed the deployment of unmanned surface vehicles (USVs) and unmanned

underwater vehicles (UUVs) for the purpose of harbor siege and sea mining.

Taiwan's executive branch is not alone in pushing the advancement of AI-powered UAVs. Taiwan's Legislative Yuan (parliament) passed "Unmanned Platform Technology Innovation Experiment" regulations at the end of No-

vember to bring forward a "regulatory sandbox" for encouraging the R&D and testing ground buildup for UAVs, UGVs, USVs and UUVs. Taiwan's legislators claimed such a regulatory act is the first in the world to cover experimental innovation on unmanned vehicles in the air, on the ground, and in/under the sea. Moreover, the regulations specifically call for AI-boosted algorithmic unmanned platforms.

Last but not least, one should take note of the National Chung-Shan Institute of Science and Technology's move in this regard. NCSIST is the primary research and development institution of Taiwan's MND Armaments Bureau, and is most representative of the prospects for AI in Taiwan's defense given its abundant financial and human resources.

NCSIST's transition into a competitive research institute has showcased some great accomplishments involving AI-powered weapon systems that are likely to become enablers for Taiwan defense transformation to an asymmetric warfighting orientation. That said, however, it remains to be seen how the institute manages the momentum of its developments in AI-related cyber warfare apparatus as well as in AI-powered UAVs. Human-machine teaming mode is likely to present the first milestone for that matter.

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“There is No New Thing Under the Sun”

review by SHOSHANA BRYEN

This is a book about past wars. No, it's a book about present wars. No, actually, it's a book about future wars. Or it's a book about your imagination.

Every War Must End by the late Fred Charles Iklé is a book for considering war – this one, that one, and the one we haven't had yet. Iklé, who passed away in 2011, served as undersecretary of defense for policy in the Reagan administration. For him, the essential lesson is that it is much easier to start a war than successfully to conclude one. Having achievable aims – both military and political – and stopping when they have been met is key to success. The alternative is to slog along with grinding casualties until the conflict peters out ignominiously when public opinion no longer supports the effort. The French, he pointed out, were the military victors in Algeria – as were the Americans in Vietnam – but in both cases, the Western power withdrew without a political victory, and public disillusionment hampered the government at home and abroad for years after.

Think of Afghanistan, except we haven't withdrawn yet.

Iklé's examples are primarily World War I, World War II, and Korea, with a bit of the Russo-Finnish and Vietnam wars thrown in. The elapsed decades make it easier to dissect them and their lessons with less emotion. But your head will have trouble not making the leap to current wars – and that's OK.

Lesson 1: Meticulously detailed reports are not a substitute for unsubstantiated assumptions or failing to articulate political and military objectives and how to achieve them.

The German high command planned in painstaking detail for unrestricted submarine warfare against the British toward the end of World War I. Berlin knew how much of what the British imported and on how many ships. Planners knew what the British considered essential items and when those would run out. But from the detailed dive into measurements, the Germans made a strange leap into political/patriotic/emotional imponderables. They assumed that the British people would force the government to fold in five months – before the Americans had an opportunity to bring their resources fully to bear. The British didn't. The Americans did. The Germans lost.

Similarly, when the Japanese were planning the attack on Pearl Harbor, they made meticulous counts of hardware, fuel and personnel. But their understanding of how the war would end was hazy. Iklé notes that, in a memorandum, the service chiefs wrote:

It is very difficult to predict the termination of a war, and it would be well-nigh impossible to expect the surrender of the United States... At any rate we should be able to establish an invincible position...Meanwhile, we may hope that we will be able to influence the trend of affairs and bring the war to an end.

The Navy Chief of Staff told the Emperor:

Even if our Empire should win a decisive naval victory, we will not thereby be able to bring the war to a conclusion...Our Empire does not

Fred Charles Iklé

second revised edition, with a new preface

Every War Must End



COLUMBIA CLASSICS

Every War Must End
By Fred Charles Iklé

Columbia University Press
2005



USS West Virginia in the aftermath of the Pearl Harbor attack. (Photo: U.S. Navy)

have the means to take the offensive, overcome the enemy and make them give up their will to fight.

Lesson 2: Failure to articulate an achievable objective may lead to side discussions, including when and how to start the fighting, but rarely leads to steps to de-escalate the crisis. **Lesson 2A:** And once the war begins, the fighting is often subject to forces other than an evaluation of the most advantageous way to stop it, either for the side that is winning to consolidate its gains, or for the side that is losing to minimize the damage. **Lesson 2B:** War aims may change radically during the fighting.

Even after understanding that the Japanese military a) could not assume/assure victory or b) even envision the end of the war, the Japanese leadership, including the Emperor, chose not to press the point. Instead, they engaged in discussions of *when* to strike Pearl Harbor, not *whether*. The Germans had the same conversation about the timing, not the value, of unrestricted submarine warfare.

Once war starts, Iklé notes, the public has a say in ending it – and the public's view may not coincide with that of either the military or civilian leadership.

Fighting sharpens feelings of hostility. It creates fears that an opponent might again resort to violence, and thus adds to the skepticism about a compromise peace...More is expected of a settlement because both the government and the people will feel that the outcome of the war ought to justify the sacrifices (already) incurred.

Failure to articulate an achievable objective may lead to side discussions, including when and how to start the fighting, but rarely leads to steps to de-escalate the crisis.

Lesson 3: “Appeasement,” and “Ending Wars before they Start” are not the same thing, but Iklé thinks they're close. He tries to resurrect the reputation of “appeasement,” but in one of the few miscues in the book, he fails.

Prior to the late 1930s, “appeasement” did not mean feeding the appetite and power of an aggressor, but pacifying through concessions a conflict that threatened to erupt into a

war. For the present era, it is critically important to understand how appeasement can succeed or fail, without being swayed by false lessons from the 1930s.

It is hard to understand the difference between “pacifying through concessions” and “appeasement.” Is there a point at which the party reaping the concessions decides, “This is enough. I don't really need any more, so I'll stop threatening the neighbors.” Or does that party think, “Well, I've gotten this much without too much trouble. I think I'll go for more.” Considering Israeli concessions to the Palestinian Arabs since the 1993 Oslo Accords doesn't help, nor does the 2015 Joint Comprehensive Plan of Action (the Iran deal), or watching China build militarized islands in the South China Sea, or watching Russia reclaim Crimea.

Churchill said, “Appeasement is one feeding the crocodile in hopes that it will eat him last,” not that the crocodile will not eat him at all. Churchill wins this point.

Lesson 4: It isn't always the political forces looking for terms against military officers looking for war. More than once,

Iklé points out, it is the military that has a better understanding of the costs that will be imposed by starting or continuing a war. Finnish military chief – and later Finnish president – Carl Gustav Emil Mannerheim opted out of Finland's alliance with Germany to make a separate peace with Russia in 1944:

I wish especially to emphasize that Germany will live on, even if fate should deny you victory in your

fighting. Nobody can give such an assurance regarding Finland. If this nation of barely 4 million be defeated militarily, there can be no doubt that it will be driven into exile or exterminated. I cannot expose my people to such a risk.

If you're starting to think about Israel here, hold on. In the chapter "The Search for an Exit," Iklé considers how countries finally see the end coming and make the necessary changes to policy. Think about Palestinians instead.

To make peace may require that the nation get rid of its leader. But the leader, in seeking advice from his ministers on how to end the war, cannot ask for a frank debate on his own political demise. Or, to make peace may require the abandonment of war aims for which men are still being asked to die. If the leaders who wish to argue for such a peace denigrate these war aims, they would be asserting that the men at the front are dying in vain. To make peace may require disbanding the existing army (or conversely, letting it rule

the country). But the civilian and military leaders in deciding how to end the war cannot have a frank debate on how to abolish each other.

Is it possible for Mahmoud Abbas to abandon the war he has been stoking for more than a quarter century? Iklé wrote of Mussolini:

Mussolini (did not argue) that he would remain on "the world scene" or that the military situation was better than his chief of staff told him. But under the stress of mounting catastrophe he could not muster the determination to choose a policy that would have corresponded to the military situation. So painful had the facts become that he could no longer face them.

Abbas, again.

Finally, then, is **Lesson 5:** This slim volume will take you places you may not have planned to go. You will read about the Korean War and think about Kim Jong Un or read about Nazi Germany and think about Palestinians. (No, NOT because they are the same, but because

some of the same logic that applied to Germany entering a war that it could not conceive of winning applies to Palestinian decision making.) Iraq, ISIS, Iran, and Afghanistan will begin to populate the pages along with the Finns, Russians, Germans, and Algerians. You will compare Charles DeGaulle to Lyndon Johnson to Barak Obama in Iraq and Afghanistan. You might find yourself asking what we're still doing in Afghanistan 17 years, more than 2,700 Americans dead, more than 360,000 Afghans killed directly and indirectly, and about a trillion dollars later. What is the military objective, and how has President Trump improved on the Obama recipe?

That would be a useful thing.

The book is also a reminder that as long ago as perhaps 400-180 BCE, Ecclesiastes – attributed to King Solomon – was writing, "The thing that hath been, it is that which shall be; and that which is done is that which shall be done: and there is no new thing under the sun." ("Ain chadash tachat hashamayim.")

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■ *A Final Thought ...*

The American Interest

If Lord Palmerston was right about friends and interests, it is American interests for which President Trump and Congress are responsible. Those interests include:

Preventing Iranian expansion into and weaponization of other countries. Iran's nuclear program is not separate from the mullah's hegemonic intentions, it underpins them. Whatever hopes America has for the region, they cannot succeed if the Islamic Republic does.

Ensuring freedom of navigation in the Red Sea and Persian Gulf. Iran's war in Yemen aims for a military position from which it could close the narrow Bab el Mandeb Straits. Israel, Jordan, Saudi Arabia, and Egypt – America's allies – would lose their Red Sea exit to the Indian Ocean. And the American base in Djibouti – our only one in Africa – would have Iranians at the door.

Preventing Iran's creation of the overland Shiite Crescent. Iran seeks a permanent presence in Syria along the land route to the Mediterranean Sea – traversing Iraq, Syria and Lebanon, and putting a "lid" on Saudi Arabia, Jordan, and Israel in the north.

Having the Arab states accept Israel as a legitimate, permanent presence in the Middle East. The burgeoning

relationship between Israel and the Arab States is based not on friendship but on a realistic appraisal of the risks posed by Iran. It nevertheless is in Israel's interest as well as ours.

Rejecting simplistic tropes about Sunnis and Shiites and building a realistic understanding of the cross-currents among its present adversaries. The closeness of Turkey and Hamas to Iran and Qatar is counterintuitive for Americans who believe the Sunni-Shiite divide is the only one that matters. It is not. Persian Iran and Aryan Turkey have fought Arabs for centuries. Today, Turkey sides with the Muslim Brotherhood against Sunni Saudi Arabia and Sunni Egypt. Shiite Iran's funds Sunni Hamas, and Iran's Sunni ally and Muslim Brotherhood supporter Qatar has made major investments in Turkey to boost its economy.

It is in the American interest to follow Lord Palmerston through a particularly messy part of the world.

– Shoshana Bryen
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