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RUSI VI

*To promote national defence and security issues
through discussion and engagement*

**Newsletter of the Royal United Services Institute
of Vancouver Island**

The Royal United Services Institute of Vancouver Island is a member of the Conference of Defence Associations. The CDA is the oldest and most influential advocacy group in Canada's defence community, consisting of associations from all parts of the country.

The CDA expresses its ideas and opinions with a view to influencing government security and defence policy. It is a non-partisan, independent, and non-profit organization.



Mark Your Calendar!

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PRESIDENT'S MESSAGE

Welcome back!

We have selected an interesting variety of speakers for this year's luncheons, detailed later in this newsletter. We are also going to do some things differently. In addition to our monthly speakers, we are scheduling some Special Events. The first, on 25 September, will be an opportunity to hear, and question local federal candidates, on their party's national defence policy. This should help prepare you for the upcoming federal election.

We are always looking to improve our newsletter's content by striking the right balance between the latest military technology, and with often overlooked topics. As an example, I bring your attention to the enclosed article, *No grunts under 26*. This is an initiative of Secretary of Defense Jim Mattis, to transform the U.S. infantry into a higher-calibre force. It is the quality of the infantry that usually makes the difference. An examination of recent conflicts in Bosnia, Syria, and Yemen illustrate the point.

Finally, this is a reminder that the annual RUSI-VI year starts this month and your annual membership dues, of \$40.00 for single, or \$50.00 for family membership, are now due. Prompt payment will be much appreciated! Please pay at the registration desk at our 11 September luncheon, or via regular mail:

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The Chinese Navy's Marine Corps -Part 2: Chain-of-Command Reforms and Evolving Training

Publication :China Brief Volume: 19 Issue: 4

Dennis J. Blasko, Roderick Lee February 15, 2019

Editor's Note: This is the second part of a two-part article discussing organizational reforms and evolving missions for the PLA Navy (PLAN) Marine Corps. The first part, in our previous issue, focused on the growing order of battle for the PLAN Marines. This second part focuses on the creation of a service branch headquarters for the PLAN Marines, and their expanding training for expeditionary warfare and other missions. Taken as a whole, this two-part article provides significant new information and analysis to update the December 3, 2010 China Brief article titled "[China's Marines: Less is More.](#)"



PLAN Marine Corps command and staff personnel examine maps in the course of a cold weather training exercise in Inner Mongolia, March 2015. (Source: Xinhua)

New Marine Headquarters Established

Along with increasing the number of PLA Marine Corps (*Zhongguo Renmin Jiefangjun Haijun Luzhan Dui*,) combat units, a corps-level Marine Corps Headquarters also has been formed. Its first commander is Major General Kong Jun—who shared responsibility with Political Commissar Yuan Huazhi, until Yuan was reassigned in early 2019 ([Penggpai News](#), May 27 2017; [Penggpai News](#), January 15). Kong spent most of his career in the Army, rising through the ranks as an armor officer and commander in the former 12th Group Army. After being assigned to the Marines, he led the Marine formation that took part in the July 2017 parade at Zhurihe Training Base in Inner Mongolia. Yuan spent most of his career as a naval political officer with service in the South Sea Fleet—where the two existing Marine brigades have been located—but was transferred to the Air Force. His successor has not yet been identified. The two leaders are assisted by deputies and a staff; among the headquarters staff, Senior Colonel Chen Weidong, former commander of the 1st Marine Brigade since at least 2010, is now a deputy chief of staff ([PLA Daily](#), July 29 2018). Due to his long experience in the Marines, he is likely to move up the ladder as leadership positions become available.

The location of the new Marine Corps Headquarters appears to be near Chaozhou, Guangdong, just north of Shantou and slightly to the east of Jieyang, where a new Marine brigade is stationed ([Xiangqiao Regional Government](#), July 26 2018). By locating its headquarters outside of Beijing, the Marine Corps organization parallels the PLA Air Force Airborne Corps—which maintains its headquarters in Xiaogan, (Hubei Province), and which also commands subordinate brigades dispersed in multiple regions. By locating its headquarters a great distance from many of its subordinate units, this structure implies that the Marine Corps is not intended to deploy and fight as an organic whole, as may be the case for Army group armies. Instead, like the Airborne, Marine brigades likely are conceived and designed to be employed independently, but supported by other elements of its parent service. As such, Marine brigades do not appear to be directly subordinate to the Theater Command Navies in whose regions they are located; rather, they fall under the direct command of Marine Corps Headquarters (MCHQ).

A major responsibility of the MCHQ will be to manage the distribution of the increasing number of missions Marine units are now required to support. These real-world tasks include: providing forces to the Gulf of Aden escort mission, which rotates among the three fleets roughly every four months; deploying personnel to the Djibouti Support Base, which opened in August 2017; and manning garrisons and newly constructed facilities in the Paracel and Spratly Islands in the South China Sea. The Headquarters will also manage training for the brigades, determining which units travel to what training areas and participate in which military competitions and exercises, both within and outside of China. It also will coordinate with the fleets to ensure that Marine units are available for service and joint exercises. Undoubtedly it will also inspect training and other brigade activities, such as political indoctrination, logistics, and maintenance.

Expanded Training Since 2014

For most of the past two to three decades, Marine brigades conducted the majority of their training in the South China Sea and near their bases on the Leizhou Peninsula. Most training was conducted independently, supported by Navy assets, and focused on island and reef operations. Only on a few occasions—such as the Peace Mission 2005 exercise with Russia on the Shandong peninsula—did Marine units engage in joint training outside of southern China. After Peace Mission 2005, Marine units began to exercise more often with foreign militaries, both in China and overseas. These opportunities increased as Navy task forces assigned to the Gulf of Aden escort mission traveled to and from their patrol duties, stopping along the way for port visits or bi-lateral exercises. Marine units have also hosted a variety of foreign visitors to their garrisons and opened a few of their exercises to outside observers.

Those training patterns changed in 2014 when the Marine Corps conducted its first winter training at the Zhurihe Training Base in Inner Mongolia. This was followed by trips to the Taonan Training Base in Jilin in 2015 and Korla, Xinjiang in 2016, which also included elements from the Navy SOF Regiment ([PLA Daily](#), January 31 2015). In addition to the cold weather, units had to contend with desert, forest, and plateau terrain, very different from the sub-tropical climate and terrain in southern China. In a second out-of-area exercise in 2015, jungle training was conducted in Yunnan in August 2015 ([PLA Daily](#), August 25 2015). In early 2018, Marine units, apparently including newly formed units, returned to Yunnan and also exercised simultaneously in Shandong ([PLA Daily](#), March 16 2018). In July 2018, the PLA hosted the “Seaborne Assault” competition for Marine units as part of the International Military Games 2018 in Shishi, Quanzhou city (near Jinjiang and at one of the new Marine brigade’s garrisons) ([PLA Daily](#), July 23 2018). These changes in Marine training indicate the determination of the PLA leadership for the Marine Corps to be ready to perform expeditionary missions in any terrain and climate.

PLAN Marine Corps Education

With the number of Marine Corps personnel roughly tripling in size and its missions expanding, one might assume that the PLAN Marine Corps Academy in Guangzhou would also expand to provide education and training for aspiring PLANMC officers. However, the Marine Corps Academy is not currently listed among the PLA’s 37 professional education institutions. As a component of PLANMC restructuring, the Marine Corps Academy has been converted into a training base; it remains active in this capacity, but it does not appear to provide college education to young Marine Corps personnel. [1] Accordingly, Marine officers and NCOs will be educated in other academies—some perhaps with Marine Corps Departments—and undergo specialized training at the training base or within their unit.

Conclusions

The 2018 Department of Defense (DOD) report to Congress states that “large-scale amphibious invasion is one of the most complicated and difficult military operations.” As such, amphibious operations require specialized equipment (both for landing and for naval/air support forces), extensive training, and intricate planning and timing in execution. Accordingly, considering the previously existing Marine and Army amphibious units and new Marine units under development, DOD concludes:

The PLA is capable of accomplishing various amphibious operations short of a full-scale invasion of Taiwan. With few overt military preparations beyond routine training, China could launch an invasion of small Taiwan-held islands in the South China Sea such as Pratas or Itu Aba. A PLA invasion of a medium-sized, better-defended island such as Matsu or Jinmen is within China’s capabilities. [2]

Campaigns against small or medium islands in China’s near seas likely would involve hundreds to the low thousands of troops delivered over the beach by a portion of the PLA Navy’s roughly 50 medium landing ships (LSM) and tank landing ships (LST) and scores of additional smaller landing craft, supported by ship-based helicopters and land-based aircraft. These assets are dispersed among all three fleets, but could be concentrated for an amphibious campaign. The Navy’s relatively new Type 071 Landing Platform Dock (LPD) large amphibious ships also could provide support to assaults on small or medium islands. Numerous civilian roll-on/roll-off ships and other transport ships may not be necessary for such limited operations, but would likely be employed in larger campaigns after a port is secured.

For missions beyond China’s three seas, the Navy’s fleet of six Type 071 LPDs, the first of which entered service in 2007, is the PLAN’s primary means of moving Marine units over long distances. These ships each can carry approximately a battalion of infantry, about 20 to 30 vehicles, and two to four helicopters for extended periods of time. Additional Type 071s are expected to enter service; and several new, larger amphibious ships, generally called the Type 075 amphibious assault ship (LHA), likely will also

enter the force in coming years ([Office of Naval Intelligence](#), 2018; [National Interest](#), March 31 2017). Depending on the availability of ships, multiple battalions, amounting to a brigade or more, could be at sea for several weeks or months. In addition to combat, anti-terrorist, or deterrence missions, these forces could be used for disaster relief or emergency evacuation operations. But assembling a multi-ship, multiple battalion task force, with some degree of sea-based air support, is probably at least a decade away as sealift is added and the PLA Marine Corps expands its resources and capabilities.

The expansion of Marine Corps is a major component of the goal to develop the PLA into a “world-class military” by the middle of the century (2049). When fully manned, equipped, and trained, the Marine Corps will provide Chinese leaders with options previously unavailable. As in Djibouti, PLA Marines will continue to be seen in places they’ve never been seen before. And, as they sing in their 2018 recruiting and propaganda videos, “We are different!” ([PLA Daily](#), March 11 2018; [PLA Daily](#), December 21 2018).

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The views and opinions expressed herein by the authors do not represent the policies or position of the U.S. Department of Defense or the U.S. Navy, and are the sole responsibility of the authors.

Notes

[1] *People’s Navy*, December 18, 2017.

[2] U.S. Department of Defense, *Annual Report to Congress: Military and Security Developments Involving the People’s Republic of China 2018*, p. 95. <https://media.defense.gov/2018/Aug/16/2001955282/-1/-1/1/2018-CHINA-MILITARY-POWER-REPORT.PDF#page=11&zoom=auto,-85,733>.

No Grunts Under 26, \$250K Bonuses: DoD's Most Radical Ideas to Transform the Infantry

[Matthew Cox](#) [military.com](#) 12 July, 2019

What would it take to transform U.S. infantry into a higher-caliber force modeled after the elite 75th Ranger Regiment? For starters, find recruits in their mid-20s and offer them \$250,000 bonuses and a \$60,000-a-year salary.

That's part of a [working concept officials from the Pentagon's Close Combat Lethality Task Force \(CCLTF\) have been turning over for the past year](#) in efforts to take [Army](#) and Marine infantry to a higher level of lethality.

The task force is the legacy of former Secretary of Defense Jim Mattis, a retired [Marine Corps](#) general and infantryman, who set out to place a new priority on a group that bears one of the heaviest burdens of warfare: the grunts.

Since its 2018 launch, the CCLTF has helped to find money in the Defense Department's budget to accelerate high-tech programs, such as [smart augmented reality goggles for soldiers](#).

But despite its Defense Department backing, the organization faces a tough fight to convince the U.S. military's largest ground force to change the way it does business. Part of the task force's plan hinges on the Army's ability to revamp the antiquated methods it uses to recruit, select and train infantry and other select specialties with key roles in close combat.

"There is truth in this fact that we have not paid great attention to this idea of specially selecting people and incentivizing infantrymen and giving them the right skills," retired Army Lt. Gen. Thomas Spoehr, who serves as director of The Heritage Foundation's Center for National Defense, told [Military.com](#). "I think we can do a lot better in the Army ... about getting the right people into these positions."

But Chris Dougherty, a senior fellow at the Center for a New American Security, said that such an effort - - while laudable -- would be enormously expensive and unlikely to gain traction at a time when the Army is attempting to modernize its major combat systems and straining to meet recruiting goals.

"The question that I think the Army has got to grapple with is ... is this a cost-effective use of Army dollars," said Dougherty, who served in the 75th Ranger Regiment in the late 1990s.

"I don't think that we are headed into a period where ... you are likely to see heavy investment in light infantry."

Army Maj. Gen. Robert Scales, a key adviser to the CCLTF, has some strong words for critics of the overhaul effort, however.

He called them "professional personnel-ists, those who practice the black arts of human-resource, personnel management."

"They approach it from the standpoint of efficiency and management," Scales said.

Soon after the task force was first created, it became clear that supporting new, high-tech weapons and equipment would not be enough to truly increase lethality and performance in infantry units, Scales said.

"Just a few months into it, all of us came to the realization that, you know, the toughest nut to crack is policy, and the culture of neglect that close combat forces have endured literally since the inception of the Army 244 years ago," Scales said. "The problem is, when you get into the Army's sausage-making machine, the frictions begin to arise, and everybody comes up with a whole series of what-abouts and what-ifs."

Scales praised the Army's decision to increase infantry one-station unit training (OSUT) from 14 weeks to 22 weeks, saying the change had "yielded enormous benefits."

"But we always slap back to that machine-age World War II era model," he said. "Our system of training most of the Army, except for infantry OSUT, is no different than it was when we built an eight-million-man Army in 1942 and 1943."

While the plan is still in its infancy, Scales said the task force is considering recommending that infantrymen should not be recruited until age 26, so they have more life experience.

Part of the criteria for infantry would "propensity to do well in infantry-specific skills," as evaluated [on a special test](#), Scales said.

"Then you say ... if you get through what, we are suggesting to you, we are going to [pay](#) you \$60,000 a year and when you complete training, we are going to give you a \$250,000 bonus," he added.

Currently, Army E-4s and E-5s make between \$26,000 and \$36,000, depending on how much experience they have.

The [Army did just increase the maximum bonus to \\$40,000 for recruits who sign up for a six-year stretch in the infantry](#), but the incentive is only set to last until Sept. 30. Then, the maximum bonus for a six-year enlistment in the grunts will likely return to around \$15,000.

Recruits would be brought in at the grade of E-4 or E-5 and could possibly be allowed to retire at half-pay after serving 13 years, "if you spent nine of those 13 years climbing up and down the mountains of Afghanistan," Scales said.

Recruiting Challenges

Military experts say that recruiting higher-quality soldiers, specifically for the infantry, will be extremely challenging "in an Army that is already having problems meeting its recruiting targets," Dougherty said.

The Army launched a bold new recruiting strategy last year after it missed its 2018 recruiting goal by 6,500 soldiers.

The scores on the Armed Services Vocational Aptitude Battery "are going to have to be higher; the physical fitness standards are going to have to be higher," Dougherty said. "If you want to raise all those thresholds ... it's going to put a real hurt on your recruiting."

Maj. Gen. Frank Muth, the commander of U.S. Army Recruiting Command, told [Military.com](#) it's all about the numbers.

"From my perspective as a recruiter, it depends on the numbers you are looking for, and that is why the Ranger Regiment does so well. Because they are not looking for large numbers," Muth said.

The task force is looking at effecting transformation for a much bigger population: 44,000 infantry and close-combat personnel in the active Army, Marine Corps and Special Operations Command, Scales said.

"We might want to say that those [military occupational specialties] that habitually accompany close-combat units might be included as well, and that would include [fire support] teams, medics and sappers," Scales said.

"By the way, we are talking about long service here, so you are not recruiting 44,000 a year, you are not recruiting 22,000 a year. You are recruiting about 9,000 a year," he added. "Are you telling me that in this country of about 325 million people, you can't find eight or nine thousand people a year who will take \$60,000, plus a quarter-of-a-million-dollar bonus?"

Muth said such an undertaking "may be hard" because it could require the Army to alter the [Occupational Physical Assessment Test \(OPAT\)](#), a four-event test that helps recruiters predict whether recruits are suited for infantry and other physically challenging jobs.

The OPAT has three performance levels, with "black" being the highest for the most physically demanding jobs.

"They would be creating a separate OPAT beyond black, and make it black-plus," Muth said. And say 'look dude, you are going to be able to deadlift 400 pounds.'... You automatically are going to start weeding people out ... that may be tough."

Spoehr said that for this infantry overhaul to work, the Army would have to use a different way of allocating people once they have decided to enter service. Recruits who meet the right criteria could be offered incentives to consider the infantry over other desired specialties, Spoehr said.

"I don't think this is going to create increased recruiting if they change the policies," Spoehr said. "It will be like, 'hey, infantry gets first dibs on this ... even though the person has always wanted to be an aircraft repairman. If the infantry wants him or her, then they are going to get that person."

More Time for Training

The CCLFT's vision for the infantry is to model the force after [the Ranger Regiment](#) so all grunts can receive more focused, intense training to hone their close combat skills

"There is no thought within the Army to even recognize the fact that close combat should be an excepted force," Scales said. "We already except close combat in SOCOM. They are, by nature, by their very definition, an excepted force."

Scales said that infantry units should be "exempt from all the boring, routine, non-MOS specific tasks" to free up more time for marksmanship and other close-quarter battle skills.

Dougherty challenged this idea, arguing that it would mean a large increase in personnel costs to take over post-support functions and other details, all as the [Army is cutting existing programs to find money to fund its six modernization priorities](#). Those priorities include long-range precision fires, the next-generation combat vehicle, future vertical lift, a mobile tactical network, air and missile defense and soldier lethality.

"What are the trade-offs? Do we really want to do this? Do we really want to spend what is likely several billions of dollars in order to do this for our forces?" asked Dougherty, who recently published a new report, "Why America Needs a New Way of War."

"And where are we taking the money out of? Are we taking it out of long-range fires? Are we taking it out of battlefield communications? Are we taking it out of the future vehicle family? Are we taking it out of future vertical lift?" he said. "I think the question I would ask is, what are the low-hanging fruit that they can grab that are going to provide them with a really high return on investment, [ideas] that don't require completely [overhauling] their recruiting and training programs, that don't require massive increases in personnel, so a handful of personnel can train more often."

Ryan McCarthy, acting secretary of the Army, told [Military.com](#) recently that he has heard [CCLTF Director Joe L'Etoile discuss the task force's concept for the infantry](#) in the past, but a formal proposal has not made it up the Army's senior leadership.

"I do recall Joe talking about that, but I haven't seen any specific initiatives," McCarthy said, adding that the CCLTF and the Army's soldier lethality cross functional team have been working very closely together on programs such as the smart combat goggles for soldiers, the Integrated Visual Augmentation System, or IVAS.

"The initiatives from the Close Combat Lethality Task Force and the soldier lethality [cross-functional team] -- they work hand-in-hand -- we have funded some of the things they wanted to do; they have funded some of the things we wanted to do ... I think it has been a great partnership," he said.

McCarthy and other Army senior leaders are banking on IVAS to help improve training for soldiers.

[McCarthy and incoming Army Chief of Staff Gen. James McConville recently got a chance to try out an early prototype of IVAS](#), a Microsoft-based system designed to project a soldier's weapon sight reticle into a pair of high-tech glasses. The system can also be used to run synthetic training scenarios, so a soldier can go through a room-clearing exercise and engage enemy fighters, much like a first-person shooter video game.

"You can get hundreds and hundreds of repetitions ... in your headsets," McCarthy said. "In particular with room-clearing, so much of it is your marksmanship in close quarters and that repetition of flowing through a room with your team members."

After running through synthetic training, leaders can use the data compiled on IVAS to see how soldiers performed on marksmanship and other tactical tasks.

"So, you can do an [after-action review] right there, and they can show you how you flowed through the room, how you performed," said McCarthy, who [deployed](#) to Afghanistan during Operation Enduring Freedom with the Ranger Regiment while he served in the Army from 1997 to 2002.

"You can get real-time feedback on your performance, so you don't make the same mistake again."

IVAS is scheduled to come out of early prototype development in 2020, but it's still unclear when it will be fielded to soldiers.

The CCLFT's infantry force of the future may still face uncertainty, but the recent leadership change at the Pentagon likely means that the organization will be around for a while, Spoehr said. [Former Secretary of the Army Mark Esper took over as acting Pentagon chief at the end of June](#) after Patrick Shanahan stepped down from the post.

"I think the stock price on the Close-Combat Lethality Task Force probably has gone up in the last two weeks. Because, I think, it faced an uncertain future under Shanahan," Spoehr said.

"Now that we have Mark Esper, a former rifle company commander, there is a chance that will continue to receive the same priority that Mattis was giving it."

-- Matthew Cox can be reached at matthew.cox@military.com.

Finally, someone has realized, in this case James Mattis, that there is more to war than technological superiority. Technological superiority is very important, but at the end of the day it is the lethality of your infantry that really makes the difference. Look around the world and many recent wars have highlighted the fact that their failures are due to a lack of, or poorly trained infantry. Bosnia, Syria and even the fighting in Yemen would have at least been much shorter if the Serbs, the Syrians or the Saudis had a truly well trained, well led and motivated infantry force. The increasing length of these wars is directly attributable to the poor quality of the infantry on both sides. You can't win wars by firepower or airstrikes alone. The longer the war, the more the suffering of the civilians caught in the middle.

Historical Support for China's South China Sea Territorial Stance



South China Sea map marked with China's claim

BY [MARK HOSKIN](#) 2019-08-10 01:35:00

There have been recent claims in the media that Great Britain and other nations who operate Freedom of Navigation Operations (FONOPS) in the South China Sea have taken no stance concerning the sovereignty of the three island groups that are the subject of dispute among China, the Philippines and Vietnam. However, there is overwhelming evidence that this is not the case. Instead, that evidence points to prior recognition of the islands as historic Chinese territory.

To examine this question, public statements by government officials regarding the Spratly, Paracel and Pratas Islands (Dongsha Islands) were examined, a common legal practice used by the International Court of Justice to show official intent.

British Government efforts at understanding China's history in the region were made in 1944 when preparations were underway for post war administration of occupied territories. The British Military Administration, Malaya, was making observations concerning Chinese maritime history in the South China Sea region:

"It must not be forgotten that while Europe was still relying on the galley in the Mediterranean and was only feeling towards the fore- and aft- rig in the North Seas and sailing in ships whose capacities

measured in tens of tons, the Chinese were already ocean sailors with junks to be found from their own coasts to the mouth of the Indus whilst the Arabs in dhows of over 1,000 tons capacity were bringing the spices of the East Indies to Egypt and the European markets.”

Chinese ability to sail across the South China Sea region and into the Indian Ocean can be seen as recognized by the U.K. Government in this statement.

Economic exploitation of the resources in the South China Sea region was recognized earlier in Europe; among the first records in the post Roman Empire period were made in 1154. Roger of Sicily’s Court Geographer, the Arab al-Idrisi, provided early recorded details of Chinese junks sailing towards the West:

“All the Chinese ships, great or small, that navigate in the China Sea are solidly constructed of wood. The pieces of timber are disposed geometrically one over the other, protected by palm fibres and caulked with flour and fish oil. In the China Sea and the Indian Ocean there are large animals 100 yards [this is probably feet] long and 25 wide, on the backs of which grow bumps of rocks and shellfish like vegetation, by which the ships are sometimes damaged. Mariners recount how they attack these animals with arrows and thus force them to move out of their way. They add that they pierce the smallest of these animals and boil them in cauldrons, that their flesh dissolves and turns into liquid fat. This oily substance is renowned in the Yemen, in Aden, on the coasts of Fars and Oman, and in the Indian Ocean and the China Sea. The people of these regions make use of this substance for filling the hulls of the ships.”

That al-Idrisi was able to record the hunting of whales in the South China Sea region in 1154 exhibits the longevity of the practice in Chinese maritime history and the long-term presence of the history itself, rendering it unsurprising that President Xi of China would invoke an observation of Chinese maritime use since “ancient times” in claiming the islands as Chinese territory.

The history of Chinese maritime trade in the region is also based on the foundation of Spratly Islands' exploitation and occupation. The Spratly Islands have been historically known to Chinese mariners, who were observed to sail through the South China Sea to Jakarta (then Batavia) by John Crawford, a mariner and trader in the 1830s. It was subsequently reported in the Japan Times in 1933 that Chinese fishing parties were leaving members who then lived on the islands.

These records of historical use have been disputed, as the BBC reporter Bill Hayton noted in 2014: “On 13 April 1930, the French Warship *Malicieuse* dropped anchor off Spratly Island, hundreds of kilometers to the south of Pratas and the Paracels and fired a 21-gun salute. The only witnesses to this display of imperial pomp were four marooned and starving fishermen unaware that they were witnessing the opening salvo in a still-unfinished battle for their fishing grounds.”

However, reports of rice supplies and other necessities arriving from China contradict Hayton's suggestion that there were four marooned and starving fishermen. Junks were commandeered for military operations on the Southern Chinese coastline, making them unavailable for the 800-mile voyage from Hainan that year, adding to the maritime issues related to the ongoing conflict with Japan (1930-1945).

After World War II, the Spratly Islands were noted by the British High Commission of Singapore as territory that was returned to China. In 1971, the following statement was made: “Spratly Island was a Chinese dependency, part of Kwangtung Province...and was returned to China after the war. We cannot find any indication of its having been acquired by any other country and so can only conclude it is still held by communist China. (Far Eastern Economic Review, December 31, 1974).”

It should be noted that this was outside of any major conflict in the modern period in the South China Sea (1930–1945, 1945–1956, 1974), and made after an exhaustive study was concluded by the U.K. Foreign and Commonwealth Office. It can therefore be considered a reasoned statement of recognition made by a knowing and authoritative governmental source who was based in the Southeast Asian before and during World War II.

The consistent nature of other statements made by Britain France and Japan suggest that these nations have historically taken the same position as China and made public statements to that effect.

For example, France occupied the Paracel Islands in the 1930s during the war between China and Japan. The occupation took place over a year after France had refused to abolish its extraterritorial rights in China, which had been held since 1844. The first official announcement concerning the seizure of the Paracel Islands was made by M. Bonnet, the French Foreign Minister at the Quay d’Orsay, stating that the islands were now occupied by two detachments of Annamite gendarmes from Vietnam in 1938. Amid the Sino-Japanese conflict, the Quai d’Orsay took the opportunity to note that “the islands have been visited by Chinese fishermen for generations” (North China Herald, July 4, 1938, June 6, 1934).

Meanwhile, the Chinese Ambassador Wellington Koo informed M. Bonnet that China continued to claim sovereignty over the islands, and Japanese Vice-Minister for Foreign Affairs Mr Horinouchi also made official representations “regarding the French **occupation** of the Paracel Islands’ (Japan Times & Mail, July 6, 1938; Portsmouth Evening News, July 7, 1938; emphasis added).

It is clear that the occupation by France of islands used for internationally-recognized Chinese historical economic life was protested by China as an invasion of sovereign territory, and was publicly repeated by Japanese officials, who wished to possess the islands for belligerent purposes that were directed towards China during their war of the 1930s and 40s. The impact today can be derived from a legal interpretation, as UNESCO and UNCLOS provide protections and rights for historic grave sites.

The United States entered the fray quietly, through information published in early US Navy Sailing Directions that Japanese newspapers then published: “West York Island ...The island is of coral formation, about 1 mile in length by half a mile in breadth, and 15 feet in height. On it are a few coconut trees and some other vegetation, and it is frequented by turtles and sea birds. Chinese fishermen from Hainan appear to frequent it during the latter part of the north-east monsoon to gather trepan as a joss-house and three graves were found on the islands, as well as an old iron cannon. Some remains of wrecks were also seen. The island seems to offer no facilities whatever for a naval station, which fact may not have been without influence on it’s being neglected by the French.”

The question now arises: what can the aforementioned countries do to resolve this issue?

First, the existence of this awareness and historic knowledge can be given recognition. As publicly available material overwhelmingly supports the Chinese perception, acknowledgment would provide a united understanding of historic use and provide a foundation for resolution.

Secondly, the historic ability of the islands to support human life and provide economic benefits of their own should be exhaustively examined, putting to rest the dispute created by the UNCLOS tribunal in *Philippines v China*.

Finally, the stipulation in the Treaty of San Francisco which requires any dispute over the meaning of the treaty be taken to the International Court of Justice for a resolution should be followed, leaving the Court to resolve the question over sovereignty of the islands, and therefore the ownership of the territorial waters and Exclusive Economic Zone surrounding them.

However, many countries would probably not support such a path, or uphold the results.

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China's National Defense in the New Era

Source [Xinhuanet](#)

Editor Li Jiayao 2019-07-24

Summary:

Today, with their interests and security intertwined, people across the world are becoming members of a community with a shared future. China is at a critical stage of completing the building of a moderately prosperous society in all respects and embarking on the new journey of building a modernized socialist country in an all-round way. Socialism with Chinese characteristics has entered a new era. The Chinese government is issuing China's National Defense in the New Era to expound on China's defensive national defense policy and explain the practice, purposes and significance of China's efforts to build a fortified national defense and a strong military, with a view to helping the international community better understand China's national defense.

See Link below for full report

http://eng.chinamil.com.cn/view/2019-07/24/content_9567553.htm

Time for a New Direction in Canada's China Strategy: Report from MacDonald Laurier Institute

OTTAWA, ON (August 16, 2019): The federal election is a little over two months away, and its outcome remains highly uncertain. Irrespective of whichever political party wins, the new government faces the challenging work of remaking Canada-China relations, which has reached an all-time low following China's hostage diplomacy and use of economic coercion in response to the arrest by Canadian authorities of Huawei CFO Meng Wanzhou.

In the latest entry in MLI's "[A Mandate for Canada](#)" series, Senior Fellow Charles Burton makes the case for a measured, principled, and forward-looking China strategy.

Titled [Remaking Canada's China strategy: A new direction that puts Canadian interests first](#), the paper details the shortcomings of the country's past approach to the People's Republic of China (PRC), outlining the need for a new strategy that better serves Canada's national interests and is more complementary to that of our key allies.

Over the past more than 25 years, both Liberal and Conservative governments have approached China based on an implied *quid pro quo*. As Burton notes, "If Canada showed 'friendship' to the PRC regime by acceding to demands allowing China to further its economic and geostrategic interests in Canada, then China would be amenable to Canadian approaches on social issues such as human rights."

Underpinning this formulation has been Canadian political naiveté about the purposes and intentions of the Chinese Communist Party (CCP), which has persisted into the early years of Justin Trudeau's government.

Yet it is not through political naiveté alone that Canada had pursued policies highly favourable to the CCP's interests. Equally important has been the CCP's United Front Work Department and its highly effective, decades-long program of Canadian élite capture.

According to Burton, "This rosy view of China relations has been supported by major Canadian business interests who benefit from lucrative interactions with Chinese Communist state commercial networks."

It is these interests, as opposed to issues of national security or Canadian principles and values, that should be at the centre of Canada's China policy. Fortunately, there are growing signs that this captured élite foreign policy consensus is beginning to fray.

"China's very strong retaliatory measures to pressure Canada to release a senior member of the regime – Huawei Chief Financial Officer Meng Wanzhou, detained under a US extradition request – has shattered any illusions about any moral obligation the PRC feels in response to Canada's many decades of asymmetrical acts of 'friendship.'"

The author offers a new direction in Canada's China strategy – one that takes into consideration the need to safeguard Canadian security, promote Canadian prosperity, and project Canadian values. Key elements of this new strategy include:

- Cracking down on harassing, coercive, corrupt, and covert activities by agents of the Chinese state against anyone, regardless of citizenship, in Canada.
- Rejecting PRC regime pressure for us to accept the Huawei bid to install 5G technology
- Condemning police excesses in Hong Kong, calling for an independent inquiry on their excessive use of force, and stating clearly that any PAP (People's Armed Police) crackdown in Hong Kong would carry serious consequences.
- Considering the use of Magnitsky Law against officials of the People's Republic of China's Communist Party (or officials from Hong Kong), especially if there is a crackdown in Hong Kong.
- Ending government collaboration in United Front Work Department activities such as Parliamentary exchanges that attempt to establish a moral equivalence between liberal democratic institutions and the CCP's puppet sham civil institutions.
- Requiring transparency for media and educational institutions that receive PRC regime funding.
- Condemning Chinese human rights abuses and concomitantly supporting agents of progressive change in China.

Canada needs to assert comprehensively its national interests in its China strategy, even if doing so will lead to pushback from the PRC and its supporters in Canada. As Burton concludes, "A measured and principled approach to China is ultimately of the greatest sustained benefit to Canada, Canada's like-minded allies, and, indeed, ultimately to China itself."

To read the commentary in full, [click here](#).

Charles Burton is associate professor of political science at Brock University at St. Catharines, Ont., senior fellow at the Macdonald-Laurier Institute's Centre for Advancing Canada's Interests Abroad, and former counsellor at the Canadian embassy in Beijing. OTTAWA, ON (August 16, 2019)

The Foreign Terrorist Fighter Repatriation Challenge: The View from Canada

Phil Gurski 21 Feb 2019

Over the past few weeks, there have been multiple news items centring on the problem of what to do with terrorist fighters that have been captured by a variety of actors in Syria and Iraq in the battle to destroy Islamic State (IS). Numbers are fluid but we do know that tens of thousands of men and women left from more than 100 countries to join IS. Many are dead, some are still fighting, a few have already returned to their homelands and the remainder are in custody. Some of those who were taken alive were subject to quick trials and summarily executed (especially in Iraq).

What then to do with the others? Those held by the Syrian Democratic Forces (SDF) – predominantly Kurdish forces – find themselves the object of efforts to get rid of them. Their jailers have asked several countries to take their nationals back. This request received some support recently when US Secretary of State Mike Pompeo [made a similar suggestion](#) (probably motivated by US concerns that these terrorists could be freed and capable of committing more attacks once American troops are withdrawn from Syria). It got another boost in US President Trump’s [recent call](#) for the EU to “step up and do the job that they are so capable of doing.”

The response of several European countries to this problem has been mixed. France recently reversed its policy and now apparently [will take its citizens back](#). Germany is considering a [similar plan](#). As for the UK, it has [hesitated to accept returnees](#) and has even stripped British citizenship from some still in theatre. In December 2018, a [Belgium court decided](#) that two women who joined IS should be repatriated from a Syrian-Kurdish camp, together with their six children. The Belgium government has appealed the decision of the court, which is still pending, stating a distinction should be made between children and their mothers with regard to their repatriation. Most recently, Danish politicians [rejected US calls to repatriate their nationals](#), stating that they had “wasted their citizenship”.

Which brings us to Canada. The question of what to do with these terrorists has dominated national news over the past week. The Minister of Public Safety, Ralph Goodale, [has stated publicly](#) that the Liberal government has no plans to repatriate Canadian IS foreign terrorist fighters, citing the possible danger to consular officials in what is still a war zone.

It is important to put the challenge facing Canada into perspective. Unlike many of its Western allies, the number of Canadians who left to join IS or other jihadi groups in recent years is fairly small.

Officials [announced a few weeks ago](#) that 250 high-risk extremist travellers with a connection to Canada have travelled overseas (although no time period was specified) – about half into Syria, Iraq, and Turkey, and the rest into Afghanistan, Pakistan and parts of north and east Africa. Approximately 190 of the 250 people who left are still abroad, with many of them likely dead. The remaining 60 have returned to Canada, but only a small number of that figure travelled to Syria, Iraq and Turkey, and most have travelled elsewhere. This pales in comparison to the figures of UK, British and French citizens and is more in line with what Sweden has had to deal with.

Despite the Canadian government’s categorical rejection of calls to take measures to facilitate the return of Canadian IS fighters, there are voices calling for a more proactive policy. Some have stated that Canada has a ‘moral obligation’ to help. There have been [interviews of prisoners](#) carried out by reporters and academics who traveled to Syria and Iraq in which the detainees profess their innocence and plead for help. A complicating factor is the presence of women and children, many of the latter born in the so-called ‘Caliphate’. Many of these women deny any role in the atrocities committed by IS,

claiming that they merely followed their husbands or were coerced to do so. [Research on the role of women with IS](#) shows a rather more nuanced picture, however, and underlines that most of these women made their own choices.

Canadians are generally not in favour of government action to repatriate these foreign terrorist fighters. Nor is it obvious that the state has a legal obligation to do so. The *Canadian Charter of Rights and Freedoms* notes in Section 6 that “Every citizen of Canada has the right to enter, remain in and leave Canada”. This does not imply that the government has to enable your return to the country, although it does mean that the state cannot prevent such return. In other words, if IS detainees are released and somehow succeed in traveling back to Canada they would have to be allowed entry.

A number of terrorism cases and settlements have put the Canadian government in a bad light of late. Several criminal trials have resulted in acquittals and [a multi-million dollar payout to former Guantanamo prisoner Omar Khadr](#) was objected to by the vast majority of Canadians. Opposition parties have taken the Trudeau government to task for saying ‘A Canadian is a Canadian is a Canadian’ in their justification for these settlements. A federal election will take place this fall and it is probable that the ruling party does not want to give its rivals material to use against it during the campaign. There is also an embryonic far right political party (the Peoples’ Party of Canada) that would benefit from any active efforts to repatriate those who turned their backs on Canada and fought for IS.

Another overarching concern is the threat of terrorism from returnees. While Canada has so far dodged that bullet (the UK, Belgium and France have not), the possibility of an attack is real. Even if the percentages of returning terrorists who commit attacks cited by Norwegian scholar [Thomas Hegghammer](#) remains a relatively low one at approximately 11 percent, that would mean some six active terrorists to date in the country. The resources required to investigate and monitor 60 returnees (or more) are significant and both the Canadian Security Intelligence Service (CSIS) and the Royal Canadian Mounted Police (RCMP), the two primary counter terrorism agencies, are facing multiple threats on many levels. It is also important to remember that one successful incident is one too many.

It is therefore more likely that the current government will continue to hope that this problem goes away. It is not likely to act more proactively in the lead-up to the election for fear of giving fodder to the other political parties. In the long run, however, government inaction risks future lawsuits alleging state negligence and if recent court cases are anything to go by there is a very real possibility that the taxpayer will be on the hook for considerable amounts of money.

Canada could, however, also examine what its closest allies are doing in this regard and adapt best practices for its situation. It also has the advantage of membership in the ‘5 eyes’ intelligence relationship that can be a significant advantage to the gathering and analyses of information relevant to determining which returnees pose the greatest risk upon return. This data may also be usable, in a best case scenario, to lay charges under the *Canadian Criminal Code*.

With the US pushing its European allies to take back their nationals, all eyes should be on developments in returnee policies and practices on the other side of the Atlantic. Canada can surely benefit from close observance and cooperation. It is also lucky, finally, that it has a relatively small foreign fighter problem in terms of number. Still, it is paramount that all relevant actors, including security intelligence, law enforcement and civil society, are allowed to weigh in on how best to manage them. With no clear ‘best practices’ for dealing with returning foreign fighters in play yet, the next couple of years are certain to be challenging.

About the Author

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The Kashmir Crisis Spotlights What A Civilizational World Looks Like – Analysis

By [Eurasia Review](#) 15 Aug 2019

India's decision to deprive Kashmir of its autonomy, alongside a clampdown in the troubled north-western Chinese province of Xinjiang and US-backed Israeli annexation of Arab land, is the latest indication of what a new world order led by civilizational leaders may look like.

In dealing with recent conflicts, US President Donald J. Trump, Israeli and Indian prime ministers Benjamin Netanyahu and Narendra Modi and Arab and Muslim leaders have put flesh on the skeleton of a new world order that enables civilizational leaders to violate with impunity international law.

It also allows them to cast aside diplomacy and the notion of a nation state as the world has known it since the 1648 Treaty of Westphalia and ignore national, ethnic, minority, religious and human rights.

Fulfilling a longstanding election promise, Mr. Modi's unilateral withdrawal of Kashmir's right to govern itself fits the mould of Mr. Trump's unilateral recognition of Israeli annexation of East Jerusalem and the Golan Heights.

The recognition was enabled by Arab and Muslim leaders who have abandoned any pretence of Islamic solidarity and credibility in their increasingly selective lip service to the plight of their ethnic and or religious brethren.

The actions and policies of Messrs Modi, Trump and Netanyahu are those of civilizational leaders who define the borders of their countries in terms of historical claims; representation of a civilization rather than a nation whose frontiers are determined by internationally recognized demarcation, population and language; and rejection of the rights of others.

Recalling the principles of Indian policy in India's first years as an independent state, historian of South Asia William Dalrymple noted how far Mr. Modi has moved his country away from [the vision of a pluralistic, democratic nation state envisioned by independence activist and first Indian prime minister Jawaharlal Nehru](#).

"Kashmir is not the property of India or Pakistan, (it) belongs to the Kashmiri people. When Kashmir acceded to India, we made it clear to the leaders of the Kashmiri people that we would ultimately abide by the verdict of their plebiscite. If they tell us to walk out, I would have no hesitation in quitting Kashmir. We have taken the issue to the United Nations and given our word of honour for a peaceful solution. As a great nation, we cannot go back on it," Mr. Nehru said in 1952.

Indian polls have shown that as many [as two thirds of the residents of the Kashmir valley, one of the world's most militarized regions, want independence](#).

Mr. Modi signalled that he knew that he was playing with fire in what former US president Bill Clinton once dubbed ["the most dangerous place in the world."](#)

Anticipating that his move would be rejected by India's Muslim community, already on the defensive as a result of Hindu nationalist assaults, Mr. Modi **sent ten thousand troops to Kashmir in advance of the revocation, detained scores of political leaders, ordered tourists to leave the region, closed schools and shut down telephone lines and the Internet.**

To be sure, the timing of Mr. Modi's move was likely propelled by Mr. **Trump's recent offer to mediate the Kashmir dispute** that India rejected out of hand and US negotiations with the Taliban that could lead to a US withdrawal from Afghanistan and potentially to a Taliban takeover. Both developments would strengthen India's arch-rival Pakistan.

Nonetheless, Mr. Modi, aided and abetted by likeminded civilizational leaders, has redefined Mr. Nehru's notion of greatness by framing it in terms of Hindu rather than Indian nationalism, an approach that allows him to go back on the promises and legal, political and moral commitments of his predecessors.

So has Mr. Netanyahu even if Israel's legal annexation of Arab territory conquered during the 1967 Middle East war was enacted by his predecessors.

Mr. Trump may have emboldened Mr. Modi by setting a precedent for violation of international law by **recognizing Israel's unilateral annexation of East Jerusalem conquered from Jordan and the Golan Heights captured from Syria** as well as de facto endorsing Israeli settlement activity on the West Bank.

Most likely, so did Chinese president Xi Jinping who has been able to ensure that the Muslim world has remained silent, and in some cases even endorsed his brutal clampdown on Turkic Muslims in Xinjiang in what constitutes the most frontal assault on a faith in recent memory.

Civilizational moves in Kashmir, Xinjiang and Israeli-occupied territories risk in the short and/or longer term sparking violent conflict, including a confrontation between nuclear powers India and Pakistan and mass popular unrest.

Some **ten thousands Kashmiris spilled into the streets in recent days to protest** against the revocation of self-rule the moment India eased a government-imposed curfew.

Splits in the Islamic world on how to respond to civilizational moves in long-standing disputes involving Muslim communities could prove to be a double-edged sword for Arab and Muslim leaders who increasingly prioritize what they see as their countries' national interest above Islamic solidarity and the defence of the ummah, the Muslim community of the faithful.

Like with Xinjiang and Israeli-occupied Arab territory, **Turkey** and **Malaysia** were among the few Muslim nations to publicly criticize the Indian move.

The United Arab Emirates went out on a limb with its ambassador to India describing the revocation of Kashmir's autonomy as **an internal Indian matter** that would help improve the efficiency and effectiveness of administration and socioeconomic development in the region.

UAE minister of state for foreign affairs Anwar bin Mohammed Gargash **subsequently sought to bring the UAE in line with most Muslim states** who called for restraint and a peaceful resolution.

The Islamic world's varied responses to multiple crises that target the rights of Muslims suggest not only impotence but also a growing willingness to sacrifice causes on the altar of perceived national interest and economic advantage.

The question is whether that is an approach that would be popularly endorsed if freedom of expression in many Muslim countries were not severely restricted. The risk is that leaders' inability to gauge public opinion or willingness to ignore it eventually will come to haunt them.

Nuclear-Powered Cruise Missiles Are a Terrible Idea. Russia's Test Explosion Shows Why



PATRICK TUCKER TECHNOLOGY EDITOR AUGUST 14, 2019

When President Donald Trump heard that Russia's experimental nuclear-powered cruise missile had **exploded**, killing seven scientists and causing a major radiological incident less than 300 miles from the Finnish border, he fired off a boastful **tweet**. "We have similar, though more advanced, technology," he said.

This is...not accurate. In the late 1950s and early 1960s, the United States pursued a less advanced version of a similar technology but abandoned the effort before ever launching an actual test vehicle. Nuclear-powered cruise missiles, the Pentagon concluded, are a bad idea.

But the concept still appeals to Vladimir Putin, who last year **revealed** his pursuit of an "unlimited-range" missile that Russia calls the **9M730 Burevestnik** (Storm Petrel) and which NATO has dubbed the SSC-X-9 Skyfall. A missile powered by a small nuclear reactor could cruise about its target for days, giving it a wide range of potential targets it could strike upon command.

In 1957, the U.S. Air Force and the Atomic Energy Commission launched Project Pluto to build the Supersonic Low-Altitude Missile. The work proceeded at the **Lawrence Radiation Laboratory** (today, Lawrence Livermore National Laboratory), in Berkeley, California, under the supervision of **Charles "Ted" Merkle**, a hard-driving physicist. In 1959, Merkle **reported** to the Air Force on the feasibility of the project, noting a number of enormous technical challenges but also "some interesting and exciting possibilities to discuss."

Like the makers of Skyfall, Merkle decided on a **ramjet** design. Powered into the sky atop a conventional rocket booster, the ramjet would compress incoming air in a uniquely shaped chamber, superheat it with a small nuclear reactor, and expel it as exhaust, propelling the missile almost three times faster than sound.

The biggest challenge: nuclear reactors are fragile things. Putting one in a cruise missile would require a design that could withstand three types of stress that no previous reactor had needed to endure.

“There are the stresses associated with the pressure drop through the ‘reactor’ and, as indicated earlier, this stress is of the order of hundreds of psi [pounds per square inch] when spread over the entire reactor,” Merkle wrote. “When concentrated at various support points, it contributes loads like thousands of psi. Next in order: to transfer heat from the fuel to the air stream, there must be a temperature drop in the fuel-bearing materials and, for typical ceramics and power densities that would be of interest for possible missile applications, stresses of many thousand psi result as a consequence of these temperature differences.”

Then there were the inertial stresses of flight. “Since in principle such ramjet power plants can operate from sea level to quite high altitudes, rather large ‘gust loadings’ must be anticipated,” he wrote.

Undaunted, the lab went to work creating a 500-megawatt reactor that could operate at 2,500 degrees Fahrenheit. Four years later, after much experimentation with different materials and the careful assembly of 500,000 small fuel rods, they had an engine called Tory-IIA.

On May 14, 1961, they tested it at an 8-square-mile facility in a desolate area of Nevada called Jackass Flats. But they wouldn’t be able to fly it, not yet, since it was potentially a nuclear bomb. Instead they used a flatbed rail car.

In a 1990 article for *Air and Space Magazine*, Gregg Herken writes that “the Tory-IIA ran for only a few seconds, and at merely a fraction of its rated power. But the test was deemed a complete success. Most importantly, the reactor did not catch fire, as some nervous Atomic Energy Commission officials had worried it would.”

But as Herken tells it, Washington was already beginning to cool to the idea of a nuclear-powered cruise missile. The biggest reason: the missile’s unshielded nuclear reactor would spew radiation along its flight path, potentially irradiating its own ground crew and everyone else between the launch pad and the target.

Anticipating this, Merkle downplayed the danger in his initial 1959 report, using language that sounds ripped directly from *Dr. Strangelove*. “One problem that bothers the design of reactors to be used near people is the necessity of confining all the fission products to the reactor fuel element,” he wrote. “A typical mission might produce some-what less than 100 grams of fission product. Of these it might be expected that some large percentage would naturally remain in fuel elements...Consequently the fission activity introduced locally into the atmosphere is minute compared with even the most minute atomic weapon.”

Edwin Lyman, senior scientist and acting director of the nuclear safety project at the Union of Concerned Scientists, offers some perspective. “I suppose that at a time when the nuclear weapon states were still engaged in atmospheric testing, there wasn’t a whole lot of concerns about releasing additional radioactivity into the environment. Merkle’s cavalier attitude seems in tune with the era. But such a system should be considered completely unacceptable today,” Lyman told *Defense One* in an email.

“One thing is that to characterize radiation releases in terms of ‘grams’ is misleading. Chernobyl released only a few hundred grams of iodine-131 yet it resulted in thousands of thyroid cancers among children.” He noted that the Pluto tests ejected not only radioactive gases but far more dangerous radioactive particle matter as well.

The team tested a modified version of the engine once more in 1964 and the project was canceled.

The high fallout, both politically and literally, mean that nuclear-powered cruise missiles remain a terrible idea, says Kingston Reif, the director for disarmament and threat reduction policy at the Arms Control Association. “If you think the current excessive [U.S. plans to replace the U.S. nuclear arsenal](#) are controversial, imagine the negative domestic and international reaction to a U.S. effort to renew R&D on nuclear cruise missile powered by an unshielded nuclear reactor,” said Reif. “Russia should abandon development of this grotesque, unnecessary and almost certainly unworkable weapon immediately.”

Added Lyman, “if the missile was shot down, the fuel would overheat and you’d have a 500-thermal-megawatt reactor meltdown — about one-sixth the size of a large power reactor — but without any containment. Also, the lack of radiation shielding would make it difficult, if not impossible, for emergency responders to approach it.”

That’s similar to the problem Russia is grappling with right now.

Patrick Tucker is technology editor for Defense One. He’s also the author of The Naked Future: What Happens in a World That Anticipates Your Every Move? (Current, 2014). Previously, Tucker was deputy editor for The Futurist for nine years. Tucker has written about emerging technology in Slate,

Russia’s Defense Industry in Increasing Disarray as More Plants Set to Close

The Jamestown Foundation, Eurasia Daily Monitor Vol: 16 Issue – 109

By Paul Goble July 30 2019 – 18:07hrs



Workers assemble a Su-35 fighter (Source: Marina Lystseva)

Russian President Vladimir Putin constantly talks about how his country is building up its Armed Forces and supplying them with super weapons, but Russia's defense industry is increasingly incapable of making those promises a reality. With growing debt (because the state has yet to pay for what it has ordered), increasing shortages of skilled workers and an inability to come up with domestically produced components (now unavailable because of sanctions), Russia's defense contractors are in serious trouble. Deputy Prime Minister Yury Borisov says that ever more defense firms are "living from hand to mouth," while others contend that the entire sector is "in crisis" and that many of the largest and most important plants will have to close down entirely ([RBC](#), July 8). If that occurs, Putin's words will ring increasingly hollow.

In early July 2019, Borisov shocked many when he declared that Russia's military-industrial complex was seriously in debt. Additionally, he asked the government to take steps to write off 600 billion–700 billion rubles (\$10 billion–\$13 billion) in bank loans that the defense firms needed to take out because the government had not paid them for orders it had placed ([RBC](#), July 8). The total indebtedness of the sector is now "more than two trillion rubles" (\$30 billion), he acknowledged; yet, two-thirds of that, Borisov argued, is normal and still serviceable. The remaining third, however, threatens the survival of firms that are now barely able to keep their heads above water—not to mention their bank lenders and the economy as a whole.

The problem has been growing over the last year, officials on Borisov's staff say; and their boss has been pressing the government to do something behind the scenes since at least 2017. The situation has become serious enough that the deputy prime minister concluded he had no choice but to go public with his warnings. The beleaguered defense manufacturing sector, he contended, threatens not only the ability of the Kremlin to continue its military buildup but also could harm Russian banks, many of which are owned by business interests close to the government. Among the defense firms in the most dire straits are Almaz-Antey, Uralvagonzavod, and the United Aircraft Construction Corporation, according to Viktor Murakhovsky, a retired colonel who edits the defense journal *Arsenal Otechestva* ([RBC](#), July 8).

Neither officials at the finance ministry nor the major banks that hold the loans have been willing to respond to *RBC's* queries as to how such a write-down of debt might work. Murakhovsky, for his part, suggested that almost the only way for this to happen is for the government to take money from the state budget and give it to the banks. If that occurs, it will have to come from somewhere else, forcing cutbacks in other sectors, deficit spending and greater upward pressure on inflation, and/or new taxes of one kind or another. No one thinks the banks will absorb the cost of bad loans: they have successfully resisted doing so in the past, and they will continue to do so now. Indeed, as the quality of the debts of the defense sector has declined, the banks have raised the interest rates they charge, making carrying costs even more burdensome.

As the politicians debate, the situation in the Russian military-industrial complex continues to deteriorate. Yesterday (July 29), Aleksandr Stepanov, a *Versiya* journalist who follows the sector, reported on conditions there with the alarming headline "The Military-Industrial Crisis" ([Versiya](#), July 29). Given the problems he points to—on top of the debt problems Borisov raised—that article title does not appear to be an overstatement. Some plants in the sector have already cut their workweeks, while others are on the brink of doing so—something that threatens the livelihood of a significant portion of the two million Russians employed in the defense manufacturing sector. Certainly, if a large number of plants end production because of bankruptcy, the Russian military will fail to receive the aircraft, tanks, missiles and other equipment Putin has promised. But in addition, the country is likely to face new unemployment and underemployment and an increase in the number of decaying company towns, which have often proved to be seedbeds of protest.

A major reason for the indebtedness in the Russian defense industry, Stepanov says, is that the firms have been trying to diversify their production because they cannot rely on state funding, nor can they acquire parts from abroad needed for military production. Yet, such diversification requires money—lots of it—and too many Russian defense manufacturers have had to take on additional loans that they cannot service. Declining government spending on certain defense goods has also exacerbated the problem, as has the government’s insistence (harking back to Soviet times) that it, rather than the firms, will set the prices to be paid, often keeping them far below the costs of production. Finally, massive systemic corruption has further aggravated these difficulties ([Versiya](#), July 29).

Vasily Zatsepin, a military economist at the Gaidar Institute for Economic Policy, suggested to Stepanov that economic repercussions of this situation are bound to worsen in the coming months because the government does not want these firms to fail lest it lose the capacity to use them in the future. Consequently, he says, the Russian taxpayer will be asked to bail out these struggling defense companies. When that happens, the population’s purchasing power will decline further, making it even more difficult for the Russian economy to pull itself out of the current doldrums—only the latest way in which Putin’s militarism is harming the already hard-pressed Russian people ([Versiya](#), July 29).

Viking Air to put special missions’ aircraft on tour

David Pugliese, Ottawa Citizen

Updated: July 8, 2019



Viking Air Limited of Victoria, BC has announced its plans to hold a world demonstration tour for its Guardian 400 aircraft, the special missions variant of the Viking Series 400 Twin Otter. The world tour will include detailed briefings and demonstration flights in Europe, Africa, Middle East, India, South East Asia, Oceania, and North America, according to Esprit de Corps magazine.

The company unveiled the special mission variant last month at the 2019 Paris International Airshow.

Here are more details of what I wrote for Esprit de Corps:

For the past six months, a production Series 400 Twin Otter has been undergoing modifications to transform into Viking's Guardian 400 demonstrator aircraft for the proposed world tour, the firm noted. It will feature a left-hand SCAR pod with Hensoldt Argos EO/IR imaging turret, multi-spectral HDTV camera, mega-pixel HD Thermal imager, laser range finder, multi-mode auto tracker, and Remote Image Bus (RIB) video feed for display on the cockpit MFD or crew workstation. The demonstrator will also feature a right-hand SCAR pod with Leonardo Osprey Radar System and Sentient Vidar Camera system.

In addition to its mission sensor package, the Guardian 400 prototype will be equipped with an Airborne Technologies' tactical workstation with high-definition touchscreen monitors, data/voice/video recorder, Mission Management Unit (MMU), mission radio communications, intuitive hand controller for MCU & SLR camera targeting, CarteNav AIMS mission system software, Kestrel MTI targeting software, and IKHANA ergonomic mission seat for optimized crew comfort. The prototype will also be equipped with Viking conformal bubble windows, left and right wing-mounted hard points by IKHANA, Thunder Bay Aviation stretcher racks, and an aft lavatory for crew comfort.

The tour is expected to start in September. It will end in May 2020 at CANSEC 2020 to be held in Ottawa.

The Russian Sale of S-400 Missiles to Turkey May Change Power Equilibrium in the Middle East

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By: [Pavel Felgenhauer](#) July 18, 2019 09:00 PM



Antonov An-124 delivers parts of the S-400 missile system to Turkey Source: Turkish Ministry of Defense)

For centuries, Russia has spent vast amounts of blood and treasure and fought multiple wars in the hopes to either directly annex the Turkish Straits—the Bosphorus and the Dardanelles—or to establish a friendly vassal regime there that would control the strategic waterway and allow only Russian warships to pass. Moscow’s control over the Straits is vital to ensure secure Russian access to the Mediterranean region and to effectively move southern Russia’s line of defense from the littoral waters near Sochi and Taman all the way out to the Aegean Sea.

Since the 15th century, Russia has presented itself as the only true successor of the Byzantine Orthodox Roman Empire; indeed, the double-headed eagle on the coat of arms of the House of Palaiologos—the last Byzantine imperial dynasty—today makes up the national coat of arms of the Russian Federation. Capturing Istanbul (Constantinople), restoring the Orthodox cross on the Hagia Sophia (the Ottoman Turks turned it into a mosque; at present, it is a museum), taking the coveted Straits, and ultimately uniting the Balkan and Middle Eastern Orthodox people under Russian rule seemed close at hand several times in the last couple of centuries. But each time, as Russian forces invaded and marched to Constantinople or planned to land troops on the Bosphorus, something went wrong. Nonetheless, in 1833, the Russian navy actually succeeded in landing some 30,000 troops on the Bosphorus to stop the advancing forces of Egyptian ruler Mehmed Ali and saved the Ottoman Sultan Mahmud II. The Russian forces withdrew only after the Turks signed a mutual defense compact—the Treaty of Hünkâriskelesi—effectively turning Turkey into a Russian protectorate with a secret clause requiring the closure of the Dardanelles to all foreign warships at Russia’s command. The modern-day equivalent of such a treaty is arguably the ultimate goal of Moscow’s present Middle Eastern policy.

As components of Russian S-400 air-defense complexes arrive in Turkey (see [EDM](#), July 16), dramatically escalating the tensions in relations between Ankara and Washington, Moscow sees the moment as a great opportunity that must not be squandered. For the Kremlin, the S-400 purchase must not be a

onetime event, but a basis on which to re-establish “historical relations” that were previously undermined by foul Western influence and local duplicity ([Nezavisimaya Gazeta](#), July 17).

Initial reports about Moscow and Ankara discussing the purchase of advanced S-400 missiles appeared in November 2016, and the contract was officially confirmed in September 2017. Turkey was to buy four S-400 batteries (or “divisions,” as they are known in Russian artillery or air-defense forces) for an estimated sum of \$2.5 billion. Turkey paid an undisclosed cash advance on the purchase, and the rest was covered by a loan provided by the Russian government. In the Russian military, a typical Aerospace Forces (*Vozdushno-Kosmicheskiye Sily—VKS*) air-defense regiment has two or three S-400 or S-300 divisions. The United States and other North Atlantic Treaty Organization (NATO) members have been unsuccessfully trying to dissuade their ally Turkey from purchasing and deploying the Russian-made S-400s, which reportedly cannot be integrated with Western (NATO) air defenses. Moreover, this Russian tech could prove to be a security risk for the Alliance by collecting and passing detailed radar information about the newest US stealth F-35 Lightning II fighter. Turkey builds components for the F-35 and has contracted 116 F-35 jets for some \$10 billion. To avoid the possible security breach caused by the coexistence of US F-35s and Russian S-400s within the Turkish military, Washington has offered to sell Ankara US Patriot anti-aircraft missiles instead and threatened to impose sanctions and to kick Turkey out of the F-35 program, but President Recep Tayyip Erdoğan steadfastly refused to cancel the deal with Moscow. On July 12, the initial components of the first S-400 division began arriving at an airbase near the Turkish capital, delivered by super-heavy VKS An-124 transport jets ([Newsru.com](#), July 12; [Kommersant](#), July 13).

Stage set for an escalation in the US-Turkey confrontation – Impact on NATO?

The stage was set for an escalation in the US-Turkey confrontation. Russian arms deals and their execution tend to be highly secretive, but not in this case. Both sides seemingly deliberately turned the airborne delivery into a public relations spectacle, posting footage of the transport jets being loaded in Russia and unloaded in Turkey. An S-400 battery consists of multiple heavy trucks, special transporters, different radars, equipment, missiles, launchers and supplies. But considering the shortage of flight-ready An-124s, the Russian airborne delivery has been dragged out over multiple days, each time accompanied by separate announcements ([Militarynews.ru](#), July 18). Reportedly, the S-400 “air bridge” will last at least a week, and the costly aerial transportation method was chosen to speed up the delivery as well as to prevent Washington from derailing the deal at the last moment ([Izvestia](#), July 15).

It would have been significantly cheaper and actually faster to deliver the S-400s the traditional way: by train to a Black Sea port and then via a single cargo ship or military transport, discreetly and directly to Turkey. But Moscow seems intent on exploiting the maximum PR hype of the S-400 sale and to use it to needle Washington—thus ensuring a maximum response, sanctions, and the possibility that the split between the NATO allies will solidify. The production of a complete S-400 division typically requires around 24 months from beginning to end. But according to Alexander Mikheyev, the CEO of the Russian arms trade monopoly Rosoboronexport, the Turkish S-400 deal was sped up “to be realized in record-breaking time.” The deputy prime minister in charge of the defense industry, Yuri Borisov, claimed the delivery of all the S-400 components to Turkey will be completed in 2019, though the training of Turkish specialists to man the system may take more time ([Militarynews.ru](#), July 17).

Moscow has been doing everything possible to ensure the contract with Erdoğan sticks despite US pressure, possibly diverting to Turkey elements of S-400 systems originally earmarked for the Russian VKS. Russia is offering Turkey Su-57 stealth fighters to replace the F-35 jets. Hopes are high in Moscow that the split within NATO may grow, thus bringing Russia a step closer toward its ultimate goal of establishing a friendly state on the Bosphorus. As the S-400s were landing in Turkey, leading *Rossia-1* TV channel anchor Vladimir Solovyev played footage of flamboyant nationalist Vladimir Zhirinovskiy, who

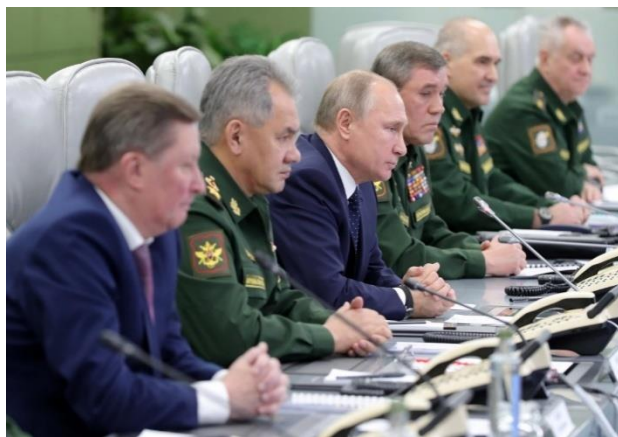
three years ago predicted Turkey would become a close Russian ally by leaving NATO and joining the Russia-led Customs Union: “Three years ago this seemed a utopia, but is it now?” ([MoskovskyKomsomolets](#), July 14).

Putin’s Fancy Weapons? Everything Old Is New Again

The super-destructive weapons touted by Russia’s president aren’t as original, or functional, as he claims.

By Yulia Latynina

Ms. Latynina, a Russian journalist, is a recipient of the Defender of Freedom Award from the United States State Department. July 30, 2019, The New York Times



President Vladimir Putin, center, watching the launch of Russia’s Avangard hypersonic missile system via a video link to the country’s National Defense Management Center, last year. Credit Mikhail Klimentyev\TASS, via Getty Images

Vladimir Putin’s Russia has openly embarked on an aggressive rearmament. The Intermediate-Range Nuclear Forces Treaty is dead (broken by Russia, then canceled by President Trump), the Strategic Arms Reduction Treaty is near death, and scarcely a month goes by without the Russian Ministry of Defense or President Putin himself boasting of a new game-changing miracle weapon — what Germans once called a wunderwaffe.

Well, do we have a new Cold War? Is there any similarity between Mr. Putin and the leaders of the Soviet Union?

In fact, there’s no similarity. The Soviet Union rarely bragged about its weapons, although it often paraded rockets past the Kremlin. It claimed to be a peaceful state, surrounded by capitalist warmongers, and when it came to new weaponry, it was extremely secretive. Back then, everything Mr. Putin is bragging about today would have been top-secret, burn-before-reading stuff. So, let’s have a closer look.

Start with the S-400 Triumph anti-aircraft system, which Turkey [recently acquired with great hype](#). Russia deployed it back in 2007 and said it was the [best air-defense system ever made](#), with a 250-mile range 40N6E missile capable of engaging targets at altitudes ranging from 15 feet to 20 miles — a capability [unparalleled by any other surface-to-air missile system anywhere](#).



Russian S-400 Triumf anti-aircraft missile systems on combat duty in the Kaliningrad Region, in March. CreditVitalyNevar\TASS, via Getty Images

But its capability hasn't had a chance to prove itself in action. The first successful test of the 40N6E missile took place in 2015, seven years after deployment; the tests were not finished [until July 2018](#), and last February the first shipment of 40H6Es was shipped off to China, which had been awaiting them eagerly for four years.

Guess what? The ship was caught in a storm, and even though those precious missiles were supposedly sealed up tight, Russian officials said they got wet and [had to be destroyed](#). So we can be sure that what made the S-400 missile system unparalleled was that it took 11 years to become officially deployed. And we still can't be sure that it's fully functional. Only God knows what Turkey is about to get.

Let's take a look at another Russian wunderwaffe: the hypersonic cruise missile Avangard. It was one of six new Russian strategic weapons unveiled by President Putin [in his state address](#) on March 1, 2018. The Ministry of Defense proudly announced that the missile, once released by a rocket, glides at 27 times the speed of sound and is capable of horizontal and vertical evasive maneuvers. It flies "like a fireball," [said Mr. Putin](#).

Well, of course Avangard has a really hot re-entry speed. But so does any other ballistic warhead. And yes, Avangard is capable of maneuvering, since it's fitted with winglets. But that's actually a very old idea — to fit a ballistic rocket with wings so it will be capable of atmospheric maneuvering. It was first tried in 1944 by Wernher von Braun with some of his Nazi V-2 rockets. It's a dead end. At extreme speed, and with a warhead on a ballistic re-entry course, whatever you gain in maneuverability, you lose in precision.

It goes without saying that Avangard is capable of striking United States territory, and that it can't be successfully intercepted. But so what? That's true of any Russian I.C.B.M.

Another of Mr. Putin's wunderwaffes is the Zirkon missile, a hypersonic ship killer with a 250-mile range. It's hard to say what it's like: Every time Russian officials boast about it, they post a photo of America's hypersonic Boeing X52 Waverider.

A hypersonic ship killer hurtling at eight times the speed of sound certainly looks impressive in video games. But the harsh reality of a high-tech war is a tad different.

Traditionally, there have been two different approaches to ship killers. The United States Navy opted for its slow, subsonic, sea-skimming but hard-to-detect Harpoon.

The Soviet Union chose supersonic missiles. It was really good at producing scramjets and ramjets. In fact, that was one of the few fields where the Soviets were at the top of the game.

The first-ever ramjet — a jet engine that doesn't need a turbine and a compressor, relying on the sheer volume of air pushed through it by the speed it develops — was Nazi Germany's V-1 "buzz bomb" that was employed to terrify the British in World War II, but only heightened their resolve. It was launched from a rail at a speed of about 370 miles per hour.

After that war the Soviets acquired some of Hitler's V-1s and V-2s and they were developed further by a bureau headed by Vladimir Chelomey. Mr. Chelomey wasn't quite successful as a designer until he employed an engineer, Sergei Khrushchev — a capable engineer, but what is more important, the son of the Secretary General of the Communist Party of the Soviet Union, Nikita Khrushchev. This gave Mr. Chelomey unlimited access to resources and resulted in the creation of some genuinely outstanding pieces of military technology.

Soviet supersonic KUB surface-to-air missiles played an enormous part in the initial stages of the 1973 Israeli-Arab war, and the Onyx supersonic anti-ship missile was a genuine marvel. At the final stage of its flight it skimmed the water at 40 to 50 feet, far higher than its American counterpart but still enough to avoid detection.

Despite all these successes, the Soviet Union never went for a hypersonic ship killer. The reason was simple. Because of the extreme heat generated by hypersonic flight, the missile wouldn't be able to fly lower than 25 miles up, making it a sitting duck for interceptor missiles.

It's true that such a missile is fast, but remember that it's a scramjet, with huge, big, nasty air intakes, on which it depends to keep aloft. Any deviation from its course, especially at low altitudes, can wreak havoc with the airflow. In other words, it's not maneuverable at any altitude, and is especially in danger of crashing if flying low.

The Soviet Union chose not to manufacture supersonic ship killers not because manufacturing them was impossible, but because they would be useless. They're great stuff for a computer game. Not so great for real-world engineering.

So this brings us back to our main topic. Almost all military hardware Mr. Putin is boasting about harks back to Soviet times. When the projects proved to be dead ends, the products were rejected even by the Soviet military — not because they were too advanced to create, but because they were not functional.

The Soviet war chest was full of monstrous projects that were always top secret, whether they were feasible or not. That's what Mr. Putin is capitalizing on — and what his generals are feeding him. Sometimes they just exaggerate, as with the S-400. But as often as not they take top secret Soviet failures and try to rehash them as public relations successes.

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Mark Your Calendar

11 September 2019

Topic: Britain's *Shield: Radar and the Defeat of the Luftwaffe*

Speaker: *Dr.* David Zimmerman. David has run our Military Oral History course at UVic for many years and is an Honourary Member of RUSI-VI

25 September 2019 (Special Event-TBC)-

Federal Election Candidates speak on national defence

(NDP, Conservative, Liberal and Green Candidates)

Liberal- Col (Ret'd) Jamie Hammond (ESS),

Conservative- David Busch (SGI)

Others to be announced.

9 October 2019-

Topic: The Information Front: The Canadian Army and News Management during WW II

Speaker: *Dr* Tim Balzer

13 November 2019-

Topic: *From Rinks to Regiments: Hockey Hall-of-Famers and the Great War-*

Speaker: Alan MacLeod

20 November 2019- (Special Event)-

Topic: *Just how serious is the terrorist threat to Canada anyway?"*

Speaker: Phil Gurski

Sunday 15 December 2019-

Christmas Reception