The military parade for the 70th anniversary of the PRC: a revealing example of Chinese strategic power

September 24, 2019

Antoine BONDAZ (FRS) and Stéphane DELORY (FRS), in partnership with Géo4i

On October 1, 2019, the 70th anniversary of the People's Republic of China (PRC) will be the occasion for a new military parade in Beijing. While the publication of the White Paper on national defence in July 2019 aimed to highlight a certain degree of transparency and warn against separatism, this parade will highlight Chinese military power, at a time when Sino-American relations are deteriorating and international arms control treaties are being called into question. As the Chinese authorities have already announced, the parade will be the largest in the history of the PRC.

Our research indicates that unprecedented conventional and nuclear ballistic capabilities will be paraded, some for the first time, demonstrating the quantitative and qualitative modernization of China's ballistic arsenal. Highly rapid, even hypersonic weapon systems could also be shown, illustrating that China is, in some respects, at the forefront of global innovation. It is worth noting that in its time, the USSR never presented a parade that brought together so many strategic and/or non-ballistic ballistic systems.

This research is based on the use of satellite images of the Yangfang military base in the suburbs of Beijing, which has been used for parade rehearsals since early July. The analysis...
of the images, carried out by Geo4i, allows the Foundation for Strategic Research to present an analysis based on original sources.

More frequent military parades under the rule of Xi Jinping

Military parades are generally held in China to celebrate the founding of the PRC on October 1, 1949. This show of force aims to show the loyalty of the People's Liberation Army (PLA) to the Chinese Communist Party (CCP), to reinforce nationalist and patriotic sentiments among the population, to demonstrate the country's military power and international weight, and, more recently, to display new weapons systems to illustrate the country's military modernization efforts. Since 1949, 14 military parades have been held on October 1, each year between 1949 and 1959, in 1984 chaired by Deng Xiaoping, in 1999 chaired by Jiang Zemin, and in 2009 chaired by Hu Jintao.

Unlike its predecessors, Xi Jinping has increased the number of military parades, with the upcoming one being its first for the PRC's anniversary. On September 1st, 2015, Beijing organized for the first time a parade celebrating the 70th anniversary of the Chinese victory over Japan, taking the opportunity to announce the reduction of 300,000 PLA troops, a few months before the announcement of a major military reform. The special feature was the presence of many foreign heads of state and government, with Russian President Vladimir Putin as guest of honor. The participation of foreign leaders is less frequent for October 1st parades, although in 1954 Nikita Khrushchev and Kim Il-sung attended.

Parade of October 1, 1950 in Beijing  
Parade of August 1, 2017 in Zhurihe

In August 2017, Xi Jinping presided over the 90th anniversary celebrations of the founding of the PLA at China's largest military base in Zhurihe, Inner Mongolia. In uniform, the Chinese leader illustrated his new title of Commander-in-Chief of the Joint Operations Command Centre acquired in April 2016. In addition, the Chinese leader presided over a naval parade in the South China Sea in April 2018, the largest in 600 years according to Chinese media reports, as well as a second naval parade in April 2019 for the 70th anniversary of the Chinese Navy.

Such an increase in the number of military parades since Xi Jinping came to power is part of the regime's objective to promote the "rejuvenation of the Chinese nation" via building "a prosperous country and a powerful army", and to develop the Chinese armed forces so that they reach a "world class" level by 2049. The upcoming parade is presented by the Chinese authorities as the most important since the foundation of the PRC. As was the case in previous parades, new strategic equipment, including missiles, will be displayed for the first time. In 2009, these included the IRBM DF-21C and ICBM DF-31A, in 2015 the IRBM DF-21D and DF-26, and in 2017 the ICBM DF-31AG.

What we will see on October 1st 2019

Our research allows us to identify, with a high degree of certainty, the weapon systems that will be paraded on the October 1st parade. To do this, we have identified the military
base on which the units that will march will rehearse. It is located 35km northwest of Beijing, in the village of Yangfang. Since 2015, this military base, which also accommodates the PLAA Institute for NBC Defense and the 82nd Army's Chemical Defence and Engineering Brigade, has been used to prepare military parades in Beijing. A great deal of work has been carried out since spring 2015 such as the construction of a 3 km-long track and a replica of Tian'anmen, the southern gate of the Forbidden City complex in front of which the grandstand is installed during the parade.

The parade will involve all Chinese armed forces and highlight many new weapon systems and equipment. The section on strategic weapons should be particularly revealing in this respect. While some of the strategic missiles and weapon systems that will be launched are already known, others have never yet been publicly disclosed and some are known only through rumors.

Although the parade of intercontinental strategic forces should illustrate an increase in the Chinese deterrent potential, the most significant developments, or even technological breakthroughs, are expected to be witnessed in the parade of medium and intermediate range systems and the reconnaissance systems that could be associated with them, the latter highlighting an increasing mastery of high and very high velocity technologies.

The images below combine satellite photography with photographs of equipment seen in Beijing Street in recent weeks, corroborating the presence of elements identified by satellite. The analysis remains uncertain for some types of systems, since they were obviously covered during their transit through Beijing but also during rehearsals in Yangfang. It is important to note that this analysis is based exclusively on the elements detected by the imagery. It is possible, if not likely, that other ballistic systems will appear on October 1.

**Consolidation of modern strategic capabilities**

**One of the most significant elements of the parade is based on the total number of ICBM-type missiles that will be presented, with 36 devices appearing during the rehearsals.** These are mainly the most recent models, either about to enter service (DF-41) or very recently deployed (DF-31AG). Until two years ago, in 2017, only 24 ICBMs (16 DF-31AGs and 8 DF-31As) had been shown, essentially representing the second generation of strategic missiles and illustrating a nuclear arsenal still in transition. If we retain the most recent hypothesis of the US Department of Defense, which puts the number of Chinese ICBMs at 90, more than a third of the force would thus be symbolically displayed.
**DF-5B/C – ICBM.** According to the analysis of the satellite images, 4 DF-5B/Cs should appear. These heavy liquid-powered missiles, often considered obsolete by Western analysts, have a considerable range, in the order of 12,000 km, combined with a large payload, estimated at about 4 tons. Not surprisingly, it was the DF-5 that, in its version B, was chosen by China to carry its first multiple independently guided warheads (MIRVs), probably associated with penetration aids. Their presence in 2019, as in 2015, confirms that this system remains of crucial importance in the Chinese arsenal. The version displayed may be the version C of the DF-5. This version may carry more warheads.

**DF-31AG – ICBM.** The DF-31AGs were exhibited for the first time in 2017, in the same number as expected for this October 1st (16 units). This is a modernized version of the DF-31A, an intercontinental range missile (10,000 to 11,000 km) but considered unsuitable for loading multiple warheads, with the increase in payload impacting its operationally useful range and drastically limiting coverage of the United States territory. The AG model could be a more powerful version, allowing a small number of multiple warheads to be carried at ranges equivalent to the DF-31A.

**DF-41 – ICBM.** Images of the missile have already been published on the Internet when travelling to parking areas, but the DF-41 will be officially presented for the first time on 1 October. It is the first Chinese solid-propelled intercontinental missile to carry a heavy payload and cover the entire United States territory. It is estimated that this missile could be armed with a relatively large number of multiple warheads, up to a maximum of 10 warheads compared to 3 for the DF-31AG. The DF-41 therefore gives China the opportunity to significantly increase the number of deployed warheads without increasing the size of its ballistic arsenal. In addition, the power of this device allows the carrying of decoys and penetration aids in addition to the offensive charge but also the adoption of more varied trajectories, which contribute to facilitating the penetration of anti-missile defenses.

**JL-2 – SLBM.** Note the possible appearance of 8 JL-2, an intercontinental sea-ground missile deployed for several years on Chinese SSBNs but never publicly revealed. Symbolically, the participation of this missile in the parade could be aimed at affirming the more operational character of the Chinese sea-based deterrent, which has been a long and complex process. It should also be noted that the JL-3 with an increased range would be under development to eventually equip the future new generation of Chinese SSBNs.
Theatre ballistic capabilities undergoing modernization

Military parade rehearsal for the 70th anniversary of the PRC, Ballistic #2

DF-20 - Cruise missile (or quasi-ballistic missile?). More surprisingly, 16 missiles that would be DF-20s (transitional denomination, the system remaining unidentified) could be unveiled. The DF-20 is probably a medium-range system, the missile being deployed on a launch erector vehicle quite typical of this class of aircraft. Most analysts estimate that this would be an evolution of the DF-10, a ground-to-ground cruise missile with an estimated range of between 1,500 and 2,500 km. The launch vehicle that is heavier than that of DF-10 and the number of missiles carried which could be reduced to two, compared to three for the DF-10, may suggest that the system could house a heavier cruise missile. A second, less likely possibility would be that the launcher would carry one or two long-range quasi-ballistic missiles for theater precision strikes. The presentation of this missile could be part of the strategy of diplomatic, economic and military pressure on Taiwan a few months before the presidential election on the island.

DF-26 – IRBM. As has been in 2015 when they first appeared, 16 DF-26 should be present. This missile, with an estimated range of 4000 km, is expected to play a fundamental role in conventional precision strike and possibly nuclear deterrence in theatre. This missile is now relatively well identified.

DF-17 - DF-ZF launcher (?). It is likely that 16 DF-17s, a missile described as the launcher of the DF-ZF hypersonic glider, are also in the parade, which would be a major first. The DF-17, is probably a short-to-medium-range missile in the DF-16 category. The available images suggest that the missile could be shown with its hypersonic glider (sheltered under the cap), which has been under test for several years. The emergence of such a system would have a considerable impact, highlighting China's progress in designing hypersonic non-strategic gliders, a segment in which Russians and Americans are lagging behind.

A transition to very high velocities
**WZ-8 - Supersonic/Hypersonic Drone.** The parade could be an opportunity to lift the veil on a second very high velocity vehicle, the WZ-8, which should appear accompanying several tactical (not analysed here) and strategic drones. This reconnaissance drone, potentially deployed by aircraft (and not by a DF-17 missile) could be powered by a ramjet (highly supersonic drone) or a super-statojet (hypersonic drone), the first hypothesis remaining more likely. This type of vehicle could be used to identify distant targets on very short notice before engaging them with a conventional ballistic strike or a DF-ZF hypersonic device. It could also be associated with anti-ship ballistic missiles (ASBMs).

**Sharp Sword – Stealth drone.** This stealth penetrating drone, also used to support naval operations, represents another kind of technological advance with the use of this type of long-range stealth drone remaining essentially the prerogative of the United States.

With the DF-17, DF-ZF and WZ-8 trio, China would have a first coherent operational brick that would not only enable it to strike at a hyper-fast speed but also exploit these technologies to drastically reduce the engagement loop and develop its conventional strike strategies into much more advanced models than those currently available, even in the United States.

**An image of power, deterrence and coercion**

These images herald a parade that, in form and substance, will mark a significant transformation of China's strategic nuclear and conventional forces. Not only does China demonstrate a capacity to rapidly develop the nuclear arsenal in terms of quality and quantity, but it also illustrates its capacity for innovation in the field of conventional precision strike forces. In the short term, the later will be able to operate over very long ranges and with very high operational tempos, dramatically strengthening China's conventional deterrence capacity and helping to inhibit the action of major regional competitors.

On the other hand, the image of power, deterrence but also coercion, which is tantamount to any major military parade, should be remarkably emphasized here. In this way, China will demonstrate that it has succeeded in achieving the feat of having a limited nuclear arsenal of almost equal quality to that of the two nuclear superpowers, and a conventional deterrence and coercion capacity that no one can overlook and that can be equaled by a few. This
message is essential in the context of Sino-American tensions and underlines China's desire not to appear to be in a weak position and not be intimidated by the United States.

A final message appears in the background: that of China's refusal to enter a multilateral logic of arms control, both at the strategic and non-strategic level despite growing pressure from the United States and its allies in this direction. By demonstrating its ability to rapidly increase its nuclear capabilities but maintaining a deliberately limited format, China is demonstrating that it is in control of its own arms without compromising on its deterrence. By accelerating the modernization of the non-nuclear segment, it claims that it will not negotiate on the category of armaments over which Washington no longer has normative power and China being the only dominant player at the moment.