

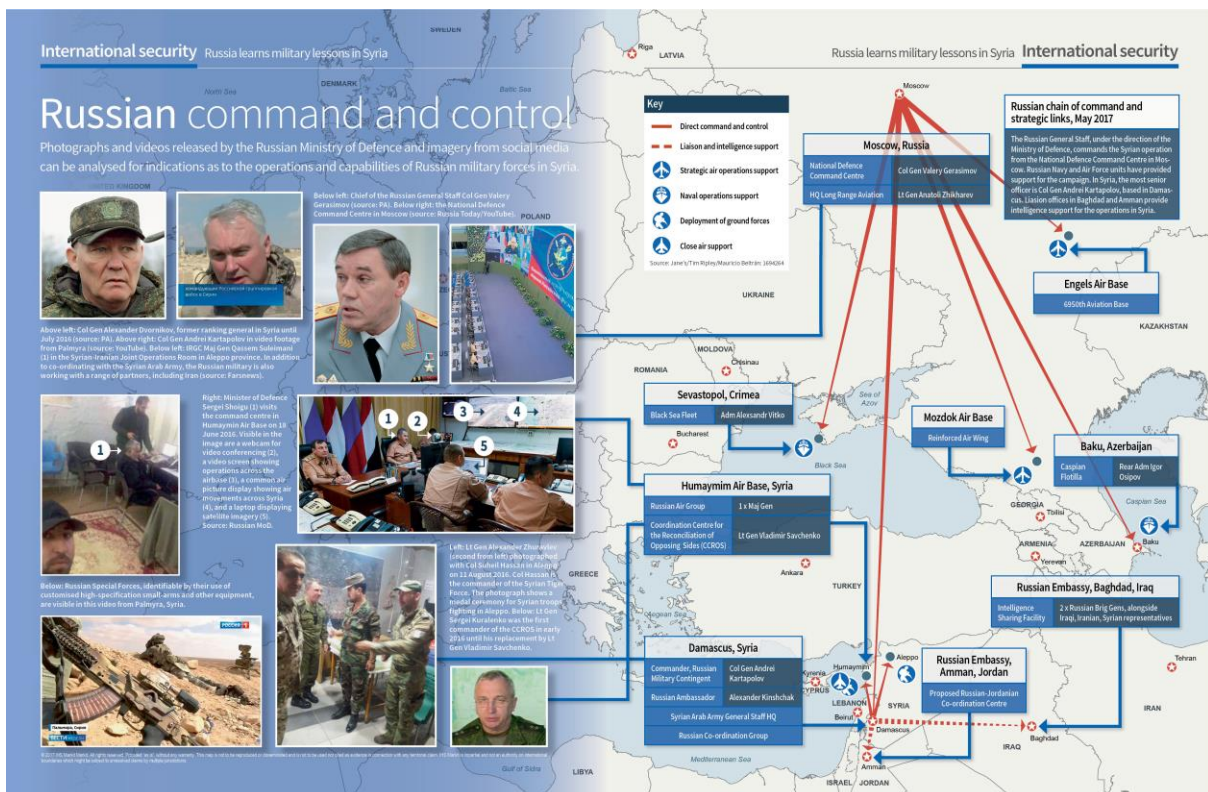
Russia learns military lessons in Syria

[Content preview – Subscribe to IHS Jane's Intelligence Review for full article]

Since 2015, the Russian military has been closely engaged in the Syrian conflict and has deployed an extensive command-and-control network for its forces and its allies. *Tim Ripley* looks at the implication of this experience for future Russian military interventions in other conflict zones

Two days after Syrian troops, backed by Russian Special Forces and attack helicopters, retook the desert city of Palmyra from the Islamic State in March 2017, television crews from Moscow travelled to film a musical concert amid the iconic archaeological ruins. On hand to provide suitably positive commentary for the Russia 1 television station was the commander of the Russian group of forces in Syria, Colonel General Andrei Kartapolov. The general was already a familiar face to Russian and international television audiences after his role in 2015 as the 'media face' of the Kremlin's intervention during Moscow press conferences about the Syrian conflict.

The presence of Russia's top military commander in Syria so near to the frontline - Islamic State fighters were still less than 2 km away, skirmishing with Syrian troops around Palmyra airbase - was a vivid illustration of the role played by Moscow's senior officers in the Syrian conflict. For outside observers, the Russian intervention in Syria offers important insights into how the Russian military organises and executes expeditionary warfare in the 21st century.



Russian command network

Although the presence of the Russian Aerospace Forces' strike aircraft and attack helicopters at Humaymin Air Base in Syria's Latakia province is usually at the heart of media coverage of Moscow's intervention, its military has also established an extensive command-and-control (C2) presence across Syria to link up the Russian contingent with its Syrian counterparts.



A Sukhoi Su-33 aircraft on Russia's Admiral Kuznetsov aircraft carrier is pictured in a photograph dated 28 October 2016. In January 2017, the Admiral Kuznetsov cruised off Libya and hosted on board General Khalifa Haftar, the leader of the self-described Libyan National Army. (PA)

1686265

The Russian military only provides occasional snapshots of its command structure in Syria, but it is possible to piece together information from public media briefings, open-source analysis of news and social media imagery from Syria, and analysis of the timeline of Russian military operations. These sources can be used to build up a picture of how Moscow controls its forces in Syria. Some of these operations are highly complex, involving strategic air and naval forces operating far from Syria, indicating high-level C2 linkages across the Russian military.

For many months, Russia kept the name of the field commander in Syria secret and did not even acknowledge it had a deployed commander. The identities of the senior air force commanders at Humaymin Air Base have also never been revealed, even in the Russian media.

Several Russian media outlets have reported from Russian bases in Syria since late 2015 and interviewed mid-level commanders, special forces operatives, and air force pilots. Their accounts give an insight into how these military operations are organised. Obituaries of senior Russian officers killed in Syria add an additional layer of detail.

Still and video imagery from Syria posted on social media and available via traditional news media, along with satellite imagery of Syrian and Russian bases, also add to the understanding of Russian operations. It is possible to identify satellite communication dishes, radio antennas, and command post vehicles and buildings. The footprint of Russian liaison vehicle and personnel deployments is illuminating. The relationship developing between senior Russian and Syrian officers can also be tracked.



Airbus Defence and Space imagery showing a destroyed hardened aircraft shelter at Palmyra Air Base in Syria. On 5 March, Russian television released footage (see inset still), probably taken on or after 3 March, showing Russian Special Forces personnel gathering in front of this hangar.

© CNES 2017, Distribution Airbus DS / © 2017 IHS Markit: 1700888

Airbus Defence and Space imagery (CNES 2017, Distribution Airbus DS / IHS Markit)

1700888

From the start of its intervention, the Russian military put great effort into creating a C2 network that mirrored the Syrian military chain of command. The commander of the Russian forces, usually an officer with the rank of colonel general or lieutenant general, is based in the Syrian capital of Damascus, close to the Syrian ministry of defence (MoD) and the military high command. Senior Russian officers of major general- and senior colonel-rank have been photographed visiting Syrian army headquarters across the country, either acting as advisers on a long-term basis or on fact-finding visits.



A Russian pilot climbing into a Sukhoi Su-25 aircraft. Given that Russia claims to have flown more than 18,000 combat sorties over Syria, with relatively few serious problems other than the downing of one aircraft in 2015, this suggests that Russian air space co-ordination measures have been relatively effective. (PA)

1686261

[Continued in full version...]

Co-ordination centre

In addition to its co-ordination and advisory network with the Syrian military, the Russian military has set up another organisation known as the Coordination Center for Reconciliation of Opposing Sides (CCROS) in the Syrian Arab Republic. According to Russian MoD announcements, the centre began its work in February 2016, has a staff of more than 60 personnel, and has a headquarters at Humaymin Air Base, with a lieutenant general in command.

This organisation frequently appears in media reports from across Syria, as well as in Russian MoD statements, and is described as being involved in brokering ceasefires with local communities and then securing deals for them to return to Syrian government control. As part of these deals, representatives of the reconciliation centre are often present to escort opposition fighters and their families out of enclaves and onwards to other opposition-controlled territory.



Airbus Defence and Space imagery showing a Russian Forpost unmanned aerial vehicle (UAV) and its operations hangar installed at Humaymim Air Base in Syria.

© CNES 2016, Distribution Airbus DS / © 2017 IHS Markit: 1700889

Airbus Defence and Space imagery (CNES 2016, Distribution Airbus DS / IHS Markit)

1700889

Reconciliation centre officers played a key role in co-ordinating the evacuation of opposition fighters from eastern Aleppo, along with more than 30,000 civilians, in the second half of 2016. The reconciliation centre also plays a role in the delivery of humanitarian aid and medical support to civilians via linkages to local Syrian civilian authorities and UN aid agencies.

Accounts in the Moscow media from Russian forward air controllers suggest that the reconciliation centre also plays an important role in intelligence gathering and combat operations. Apparently, these forward air controllers routinely communicate with the reconciliation centre before authorising air strikes to check on the political affiliation of communities down range. This role - mapping the 'human geography' of the complex and multi-faceted Syrian civil war - suggests a degree of sophistication in military planning by senior Russian officers that is often not appreciated by outside observers.

The head of the centre in late 2016 was Lieutenant General Vladimir Savchenko, who replaced the first head, Lieutenant General Sergei Kuralenko. Lt Gen Kuralenko had previously headed the Russian-Syrian-Iraqi-Iranian intelligence-sharing facility in Baghdad in 2015, which further indicated the intelligence role of the reconciliation centre.



Russian armed forces on armoured personnel carriers near Aleppo International Airport. Reconciliation centre officers played a key role in co-ordinating the evacuation of opposition fighters from eastern Aleppo, along with more than 30,000 civilians. (PA)

1686260

Since 2015, the Russian military has employed a range of strategic weapons systems in Syria, including ship- and submarine-launched Kalibr cruise missiles, air-launched cruise missiles, heavy bomber strikes, land attack missiles, and carrier-launched strike aircraft. The employment of these weapon systems appears to be co-ordinated by the Russian General Staff from the National Defence Command Centre in Moscow.

President Vladimir Putin ordered a major air and missile attack on positions in Syria in November 2015 during a live media broadcast from the command centre. From imagery of the command centre, it appears to be equipped with extensive digital communications facilities, which include video conferencing links to deployed headquarters in Syria.

[Continued in full version...]

Lessons learned

During the Soviet era, Moscow's military routinely deployed to support allies in a range of conflicts from Angola to Afghanistan. However, there are likely to be few Russian officers still in uniform who can draw on this experience. Over the past 25 years, the Russian Federation's armed forces have found themselves operating mainly at home or in the territory of neighbouring countries. Russian troops did join a number of UN-authorized peacekeeping missions, including in Bosnia and Kosovo in the 1990s, but these were relatively small-scale affairs and only involved land forces and helicopters.

In this context, the Syria operation represents an ambitious undertaking for the Russian military. It has involved the military coming up with innovative solutions to C2 challenges that it has not faced in living memory. Some of the operational challenges, particularly those involving air activities and strategic missile strikes, are completely new to it.

The Russian military has clearly drawn on many lessons from studying Western operations in Afghanistan, the Balkans, and Iraq. It has been keen to adopt and integrate UAVs into its operations and choreograph them with the employment of precision-guided 'smart' munitions.



A group of Russian armed forces appears to be using a tablet computer and looking at satellite imagery. From the start of its intervention, the Russian military has put great effort into creating a C2 network that mirrored the Syrian military chain of command. (PA)

1686259

The operation in Syria also for the first time involved significant co-operation with an array of new 'allies', including Palestinian militias, Lebanese Hizbullah, Iraqi Shia militia, and Iranian forces. Tehran had a similar advisory mission in Syria, so it had to be co-ordinated with the Russian military. Iranian UAVs and Lockheed C-130 Hercules air drop missions also had to be co-ordinated with Russian air operations. The co-ordination of strategic air movements and missile strikes with countries neighbouring Syria, including Iraq, Iran, and Cyprus, as well as with the US-led coalition, was also a new development for the Russian military.

Apart from the shooting down of a Russian Sukhoi Su-24 by a Turkish aircraft in November 2015 and the bombing of Syrian troops by US and coalition aircraft in September 2016, as of April 2017 there had been no serious de-confliction incidents. Given that Russia claims to have flown more than 18,000 combat sorties over Syria, this suggests that the Russian air space co-ordination measures have been relatively effective.

[Continued in full version...]

Outlook

The Russian intervention in Syria has been a major learning experience for the Russian military across a whole spectrum of military operations. Through open-source analysis, it is possible to see how Russian C2 has evolved in the 18 months since the start of its intervention. The first airstrikes in September 2015 appeared to be largely pre-planned on static targets. By March 2017, when a handful of Russian forward air controllers working with Syrian troops recaptured Palmyra, these operatives were choreographing strikes by Mil Mi-28 and Kamov Ka-52 attack helicopters against Islamic State fighters driving around the city in pick-up trucks.



An armoured vehicle fitted with multiple receive-only satellite dishes and radio antennas is pictured in a photograph that appeared on Twitter in March 2017, claiming to show equipment in service with the Libyan National Army. The Russian military has established an extensive C2 presence across Syria to link up the Russian contingent with its Syrian counterparts - any potential intervention in Libya would be far more challenging in this regard. (Twitter/IHS Markit)

1686262

This experience means that the Russian military now has cadres of officers, of all ranks, who have been exposed to the co-ordination of large-scale air and missile operations, integration with allied forces and governments, as well as operating the communications systems and command links needed to make this happen. This experience also has major implications for the Russian military's ability to operate on the global stage. Russia clearly now has the ability to conduct 'coalition warfare' in complex environments, making it potentially an attractive partner for future allies.

For Western governments and armed forces, the Russian intervention in Syria has been deeply disconcerting. The apparent revival of Russian military power and its re-emergence as a player in the Middle East has disrupted Western influence in the region. The sophistication of Russian C2 structures in Syria suggests that Moscow has the potential to repeat this type of operation in other theatres.

Russia is clearly embarking upon a more ambitious and militarily assertive foreign and defence policy, in the wake of its intervention in Crimea and eastern Ukraine since 2014. Moscow also appears to be interested in developing its involvement in the Libyan conflict. In January 2017, the *Admiral Kuznetsov* cruised off Libya and hosted on board General Khalifa Haftar, the leader of the self-styled Libyan National Army. Reuters reported in March that Russian Special Forces had been operating from bases in western Egypt, near the border with Libya.

[Continued in full version...]

PROSPECTS FOR A RUSSIAN INTERVENTION IN LIBYA

The Russian military intervention in Syria suggests that as an organisation it is now better equipped to conduct similar operations elsewhere. However, increased military engagement in Libya would pose a fresh challenge to Russia's ability to co-ordinate with local partners. In contrast to the Syrian military, the capabilities of General Khalifa Haftar's Libyan National Army (LNA) are rudimentary. What systems and equipment the group has were either put together from former leader Muammar Ghaddafi's stockpiles or imported from suppliers of opportunity in the United Arab Emirates, Egypt, and Eastern Europe.

Much of the more advanced hardware used by the LNA is of Russian or Soviet provenance. This includes MiG-23 multirole fighter aircraft, Mil Mi-35 attack helicopters, and Mil Mi-9 multipurpose helicopters on the aviation side, and an assortment of ground vehicles that survived the 2011 NATO air campaign, including ZSU-23-4 'Shilka' self-propelled anti-aircraft guns and 9K31 Strela-1 surface-to-air missile systems. Any compatibility is likely to initially be limited to the supply of munitions and spare parts.

The LNA's more advanced command-and-control systems are likely to be ad hoc. In March 2017, a post on Twitter claimed that the group had received new communications equipment from Belgium, purporting to show photographs of the equipment arriving at Benghazi airport. *Jane's* could not independently verify this claim. This followed the alleged jamming of LNA communications during fighting for control of the Gulf of Sirte oil terminals. This indicates that the LNA's electronics systems are likely to be a collection of equipment of varying compatibility. This is a situation shared by the various other militia groups in the country, many of which are likely to co-ordinate by mobile phones.

Although Haftar received training in the Soviet Union, his officer corps comprised a mix of professional soldiers, irregular militia commanders, and tribal fighters. There is no evidence as yet of the emergence of a coherent doctrine guiding the LNA's activity or a functional chain of command. Instead, local commanders often direct their forces as largely autonomous units. This would make the co-ordination of any Russian military support, should it be forthcoming, considerably more problematic than that seen in Syria because there is no viable military chain of command for Russia to mirror.

[Continued in full version...]

Richard Cochrane is a senior analyst with the IHS Markit Country Risk Middle East and North Africa desk.

For the full version and more content:

IHS Jane's Military & Security Assessments Intelligence Centre

This analysis is taken from [IHS Jane's Military & Security Assessments Intelligence Centre](#), which delivers comprehensive and reliable country risk and military capabilities information, analysis and daily insight.

IHS country risk and military capabilities news and analysis is also available within IHS Jane's Intelligence Review. To learn more and to subscribe to IHS Jane's Intelligence Review online, offline or print visit <http://magazines.ihs.com/>

For advertising solutions contact the [IHS Jane's Advertising team](#)