The civil war raging in Syria for the last four years has attained major limelight due to the large scale deaths and human rights violations which have forced all major countries in the world including US, UK, France, Saudi Arabia, Jordan, Lebanon, Iraq, Turkey and Russia to take up active military roles in the conflict. As per the latest estimates, more than 250,000 Syrians have lost their lives and another 11 million have been displaced from their homes as forces loyal to President Bashar al-Assad and those opposed battle each other, as well as jihadist militants from Islamic State. The unrest which began in the early spring of 2011 along with the Arab Spring revolution with nationwide protests against President Bashar al-Assad's government, gradually morphed to an armed rebellion after months of military sieges.

The government has mainly relied on its armed forces to tackle the rebellion, but since 2014 local protection units made up of volunteers known as National Defence Force came to play a bigger role, gradually becoming the primary military force of the Syrian state. From the early stages, the Syrian government received technical, financial, military and political support from Russia, Iran and Iraq. In 2013, Iran-backed Hezbollah entered the war in support of the Syrian Army. In September 2015, Russia, Iraq, Iran and Syria set up a joint operation room (information centre) in Baghdad to coordinate their activity in Syria. On 30 September 2015, Russia started its own air campaign on the side and at the request of the government of Syria.

**Syrian Arab Army**

In the year 2010, International Institute for Strategic Studies, London estimated the army's strength at 220,000, with an additional 280,000 reserves, a figure which dropped drastically to 110,000 by the year 2013. A peculiar aspect is the composition of the armed forces. Alawites, which are a minority race in Syria, (make up only 12 percent of the population) are estimated to...
make up 70 percent of the career soldiers in the Syrian Army. A similar imbalance is seen in the officer corps where some 80 percent of the officers are Alawites. The military’s most elite divisions, the Republican Guard and the 4th Armoured Division, which are commanded by the president’s brother Maher, are exclusively Alawite. Most of Syria’s 300,000 conscripts were Sunni, but that number is speculated to have reduced considerably now. There have been reports of large scale defections up to the tune of 60,000 soldiers from the armed forces after their employment against the rebels.

Most of the elite divisions like the Republican guards have been liberally used by the government to crush the rebellion due to their being trusted by the president and their Alawite composition. Both, the government and the rebels were blamed for large scale war crimes during the conflict. A United Nations report in late 2012 described the conflict as being ‘overtly sectarian in nature’, between mostly Alawite government forces, militias and other Shia groups fighting largely against Sunni-dominated rebel groups, although both opposition and government forces have denied it.

**Syrian Arab Air Force**

The Syrian Arab Air Force is the aviation branch of the Syrian Armed Forces. It was established in 1948, and saw combat in 1948, 1967, 1973 and in 1982 against Israel. It has been actively utilised against militant groups ever since the Syrian civil war started. Presently, there are at least 15 Syrian air force bases throughout the country. According to the Centre for Strategic and International Studies in 2011 the aircraft inventory from Syrian Arab Air Force estimates was:

- **575** fixed-wing aircraft, comprising of:
  - Combat/reconnaissance/OCU aircraft: 461
  - Training aircraft: 76
  - Transport aircraft: 26
  - **191** rotary-wing aircraft:
    - Attack helicopters: 71
    - Armed transport/utility helicopters: 120

Most of the Syrian military equipment has been procured over the years through Russia, Iraq and other Persian Gulf Arab states. It has also generally relied on Russian arms purchases to modernise its weapons. Purchases have included anti-tank and air defence systems. In early September 2008, the Syrian government ordered MiG-29SMT fighters, Pantsir S1E air-defence systems, Iskander tactical missile systems, Yak-130 aircraft, and two Amur-1650 submarines from Russia.

**Role of Armed forces in the conflict**

Since the Syrian civil war began, the Armed Forces were sent to fight the insurgents. As the
Uprising progressed into a civil war, many soldiers began to defect from the Syrian Armed Forces and came together under the banner of the Free Syrian Army. Over a period of time the enlisted members of the Syrian military have dropped by over half from a pre-civil war figure of 325,000 to 150,000 soldiers in the army in December 2014, due to casualties, desertsions and draft dodging, reaching between 178,000 and 220,000 soldiers in the army\(^8\), in addition to 80,000 to 100,000 irregular forces. Despite shrinking by nearly half since the beginning of the civil war in 2011, the Armed Forces have become much more flexible and capable, especially in anti-guerrilla warfare\(^{10}\). Its modus operandi has switched from a traditional Soviet-modelled conventional military into a force of smaller groups fighting in close-quarters guerrilla combat with an increasing role of junior officers.

In July 2013, the Syrian government was said to be in control of approximately 30–40% of the country’s territory and 60% of the Syrian population. In August 2015, the territory fully controlled by the Syrian Army was reported to have shrunk to 29,797 km\(^2\), roughly 16% of the country\(^{11}\). The Syrian government enjoys high levels of support in certain areas under its control; according to a poll organised by British ORB-international, up to 73% of the population in government-controlled areas support the government effort\(^{12}\). A graphical representation of the area controlled by all the forces at play is shown in the map.

**Air Force**

During the initial phase of the Syrian civil war, up to mid-2012, the Syrian Air Force was involved in secondary roles, with no firing from aircraft and helicopters. The situation changed on 22 March 2012, with armed Mi-8 and Mi-17 helicopter gunships firing rockets and machine guns. It escalated further in mid-June 2012, with the use of Mi-24/25 attack helicopters capable of dropping standard aviation bombs weighting up to 250 kg, while the transport helicopters started dropping barrel bombs (essentially aerial IEDs).

Since July 2012, fixed-wing aircraft were used for aerial attacks, starting with L-39 armed trainers which were quickly joined by MiG-21s and MiG-23s. It took some more weeks before Su-22 dedicated strike aircraft joined the fight. In November 2012, the first Su-24 medium bombers were filmed dropping their heavy payload on the rebels\(^{13}\). In December 2012, conventionally armed Scud missiles and other...
similar ballistic missiles were fired against rebel positions. Subsequently, S-8 armed MiG-29 were also spotted firing rockets and guns on rebel positions. On 27 March 2014, a MiG-25 was filmed while flying at medium altitude over Hama Eastern countryside, delivering a bomb seen hitting the ground in the same video. This marked the starting point, after which all types of Syrian combat aircraft and ballistic missiles started getting actively used in the Civil War. During the aerial operations the Syrian Air Force has been suffering significant technical difficulties, resulting in less than half of the air force’s best counterinsurgency aircraft such as the Mi-25 Hind-D being available at any given time. However, the operational and technical limitations were overcome during 2013 and Syrian pilots and technicians, with the assistance of foreign experts, began to improve their operational skills. In December 2013 Jane’s reported that the Syrian Air Force had dramatically improved its operational capabilities during 2013, and was frequently conducting up to 100 sorties per day with half of these constituting combat sorties\textsuperscript{14}.

The Insurgents countered the Syrian Air Force using truck mounted, medium and heavy machine guns, dedicated antiaircraft cannons, small arms fire and starting in late 2012, MANPADS of modern Russian and Chinese designs. The insurgents increased the number of anti-aircraft equipment, overtaking different Air Defence sites and warehouses while receiving shipments of Chinese and Russian sourced material from external sponsors\textsuperscript{15}. An overall improvement in accuracy was observed as well, leading to several Syrian Air Force jets and helicopters being shot down starting from August 2012. Since insurgents besieged many airports, a high number of downed aircraft was recorded during take-off or landing. Also, many land raids and shelling of airbases led to an increasing number of aircraft and helicopters being damaged or destroyed on the ground. One of the two airbases for L-39’s was overtaken and the other was set under siege by rebels.

In spite of occasional shoot-downs, however, the Syrian Air Force has remained largely unchallenged with a good overall combat efficiency and a superior fear factor on the rebels. The Syrian Air Force’s main disadvantage is the low to nil number in precision guided weapons which allow the aircraft to stay out of range of small arms fire, AAA and MANPADS, while delivering an effective strike with minimal collateral damage. The same weakness prevents them from being able to hit multiple targets of opportunity in the same mission. However, in 2014 Jane’s Defence and Combat Aircraft Monthly reported some MiG-29 and Su-24 jets capable of launching precision guided ammunitions. Since most of the attacks on insurgent forces were with helicopter gunships and warplanes over populated areas with unguided weaponry, the bombings normally
cause collateral damage to the civilian population and infrastructure.

At the beginning of August 2015, a summary of the recent Syrian Air Force activity reported that during July 2015, the Syrian Air Force performed 6673 air attacks, the highest number since the beginning of the Civil War. It also reported that between October 2014 and July 2015, at least 26517 attacks were recorded, including 14,393 barrel bombs - which left almost 5,000 civilians killed, 1,000 of them children. This figure reported by Al-Jazeera seems a little inflated and unrealistic considering the battle capabilities of the Syrian Air Force; this also shows that the rebels’ combat attrition was overestimated, while the airframe overhauling and rotation increased the overall combat readiness of the Syrian Air Force. Since early 2015, unconfirmed rumours reported that Russian pilots were flying many combat operations for the Syrian Arab Airforce, but no independent source confirmed the claim and no Russian pilots were reported among the downed crews in the following months.

**Human Rights’ violations**

Since the start of the Syrian civil war, human rights groups say that the majority of abuses have been committed by the Syrian government’s forces, and UN investigations have concluded that the government’s abuses are the greatest in both gravity and scale. The branches of the Syrian Armed Forces that have committed war crimes include at least the Syrian Arab Army, Syrian Arab Air Force and the Syrian Military Intelligence. However the Syrian authorities deny these accusations and claim that irregular armed groups with foreign support are behind the atrocities, including Al Qaeda linked Insurgents. As of January 2015, the death toll had risen above 220,000 with estimates in April 2015 as high as 310,000. International organizations have accused the Syrian government, ISIL and other opposition forces of severe human rights violations, with many massacres occurring.

Chemical weapons have been used many times during the conflict as well. The Syrian government is blamed by opposition for the majority of civilian casualties and war crimes, often through bombings. In addition, tens of thousands of protesters and activists have been imprisoned and there are reports of torture in state prisons. Rebels have also committed various crimes and have on multiple occasions called for genocide and ethnic cleansing of Christians, Alawites, Shiite, Druze and other minorities. The severity of the humanitarian disaster in Syria has been outlined by the UN and many international organizations. More than 7.6 million Syrians have been internally displaced, more than 5 million have fled the country to nearby countries such as Turkey, Lebanon, Jordan, Iraq, Egypt and Kuwait and few hundred thousand have fled to the European Union becoming refugees.
Millions more have been left in poor living conditions with shortages of food and drinking water.

With all major world powers taking on an active role in the conflict, with the latest one being Russia, many experts have opined that a 'proxy war' is already on in the Middle East. Since this conflict has the potential to go entirely out of hand and result in a major bedlam, there is a need for the world to sit down and find a better and more practical solution; not only to the Assad opposition but also the rising IS problem.

(Disclaimer: The views and opinions expressed in this article are those of the author and do not necessarily reflect the position of the Centre for Air Power Studies [CAPS])

Notes

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