

OPERATION ALEPPO

Russia's War in Syria

**The Inside Story of
Putin's Military
Intervention in the
Syrian War**

TIM RIPLEY

OPERATION ALEPPO:

RUSSIA'S WAR IN SYRIA

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Operation Aleppo

*Back Ground Material on drone
operations in Syrian conflict,
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Nusra Front Drone Video – November 2015

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Source: <https://www.youtube.com/watch?v=XxSx3VcfSgw>

Iranian Drone Operations over Syria

The Iranian operation in Syria has featured unmanned aerial vehicle (UAV) or drone in both strike and Intelligence, surveillance, targeting, acquisition and reconnaissance (ISTAR) roles



Iranian Mohajer UAV over Aleppo
Source: <https://www.youtube.com/watch?v=WcIIPN6hC0I>



Iranian Mohajer UAV over Aleppo
Source: <https://www.youtube.com/watch?v=j8WsMHbLtPk>



Iranian Ababil-3 UAV over Aleppo
Source: <https://www.youtube.com/watch?v=jjNHA2LS4Wo>

The Iranians are deployed at least three types of drones in Syrian, including at least one armed UAV. This commitment provides the Syrian-Russian-Iranian coalition with a major ISTAR capability

Shahed-129 drone over north Aleppo
6 Feb 16
Source: @ivansidorenko1



Iranian UAV air strip in Beka'a Valley, Lebanon
Source: GoogleEarth

Mohajer UAV take off operations, ground control station and video monitor
Source: Press TV, via <http://thearkenstone.blogspot.co.uk/search?updated-min=2015-01-01T00:00:00-08:00&updated-max=2016-01-01T00:00:00-08:00&max-results=8>



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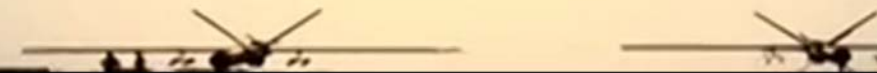
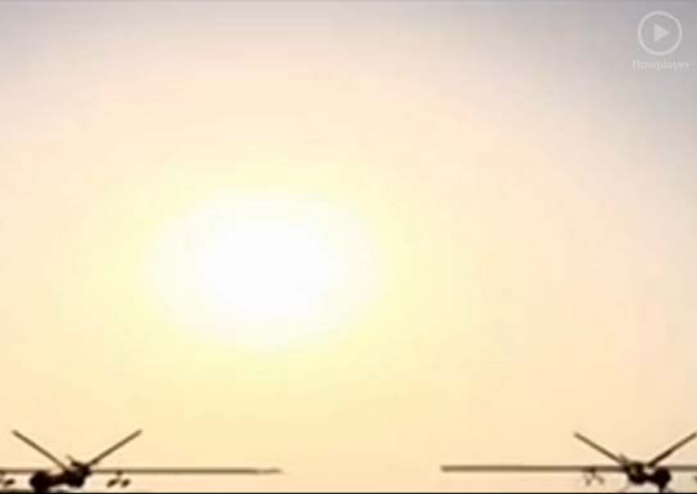
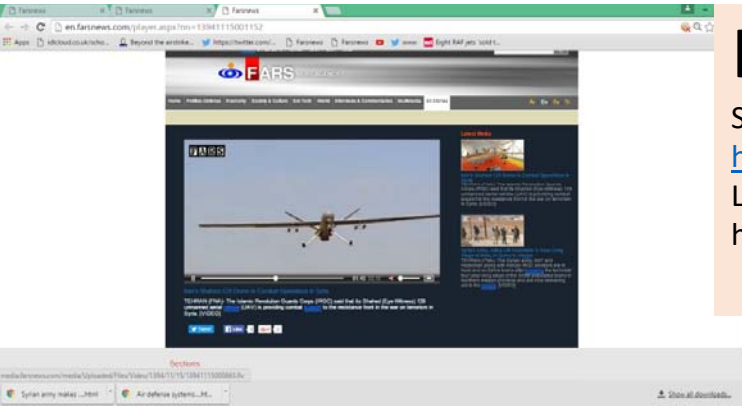
Iranian Shahed-129 armed drone in Syria

Source:

<http://en.farsnews.com/newstext.aspx?nn=13941115000734>

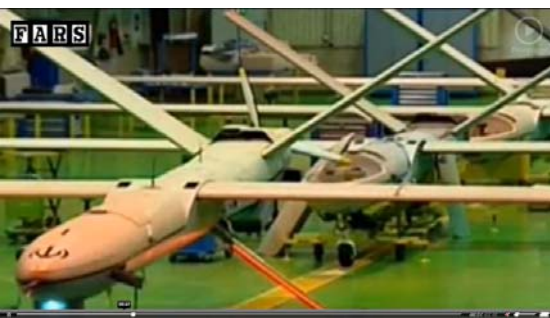
Link to video (the screen grabs are taken from this)

<http://en.farsnews.com/player.aspx?nn=13941115001152>



Shahed-129 in factory in Iran. Also images of ground control station and missile strikes.

Target co-ordinates south of Aleppo, during missile strike



Sadid-1 guided missiles



Russian Intelligence Imagery



UAV or drone video imagery is regularly released by the Russian MOD or via the Syrian state news agency (SANA). A rebel compound was identified (above) and trucks at a Turkish border crossing are seen (below) in the thermal imaging mode. The types of UAV used are not identified but the quality of the imagery and location of the Turkish border crossing suggest a long range system, such as the Forpost (Russian-manufactured IAI Searcher II variant), is in use.



Since the start of its intervention the Russian military has released a considerable quantity of still and video imagery collected by its airborne reconnaissance systems operating over Syria.



The speed at which the Russian are able to generate imagery for release to the media suggests they have a high bandwidth communications network to move high resolution imagery between command posts in Russia and the Air Group in Syria



Russian satellite imagery (above) of a ISIS oil tanker concentration in eastern Syria. This imagery is similar to commercial imagery posted on the Google Earth site.



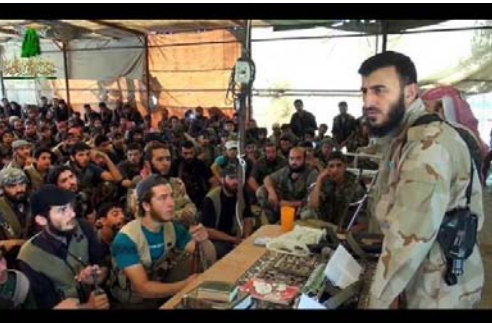
Russian satellite imagery of a ISIS oil tanker activity on the Turkish border (above). This black and white imagery is valued by intelligence analysts because it can be manipulated to determine shadow and perspective from objects, to work out their size and volume.



Video imagery (above) from Su-24 and Su-34 strike jets is collected for bomb damage assessment and intelligence assessments

Intelligence-Led Air Strikes

Russian aircraft have regularly conducted time-sensitive targeting of rebel leaders and important targets using intelligence gathered in real-time from UAVs/drones, reconnaissance aircraft, signals intelligence and human intelligence. Drones are used to monitor these attacks in real-time.

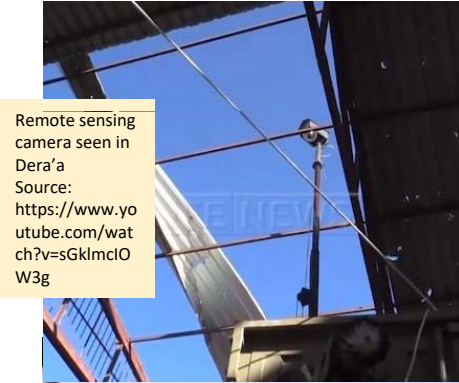


As the campaign has progressed the Russians have increased the frequency of these types of attacks, suggesting they are gaining experience in pulling them together multiple intelligence sources and then rapidly tasking attack assets. The incident on the (left) targeted a rebel leader, Mahran Alloush, in eastern Damascus on 25th Dec 2015. On the (right) an ISIS oil tanker convoy is attacked in north west Syria on 24th Dec 2015.



Syrian ISTAR and UAV Operations

The winter 2015/16 Syrian offensive has featured extensive Intelligence, surveillance, targeting, acquisition and reconnaissance (ISTAR) operations involving both UAVs and ground-based remote sensors



Remote sensing camera seen in Dera'a
Source: <https://www.youtube.com/watch?v=sGklmclOW3g>



An off the shelf 'hobby' drone in-use with Syrian troops in Latakia province, January 2016. Imagery is being monitored in improvised command post.

Source: <https://www.youtube.com/watch?v=G0q4H4eO18&app=desktop>



Ground surveillance sensor imagery being used to control a ATGW engagement near Aleppo in January 2016, from Ops Room (above)

Source: <https://www.youtube.com/watch?v=vm3FbspEHIE>



Syrian NDF soldier with Night Vision Goggles
20 Feb 16 @IvanSidorenko1



Syrian Arab Army UAV Operations

The Syrian Arab Army (SAA) offensive towards Raqqa also features extensive Intelligence, surveillance, targeting, acquisition and reconnaissance (ISTAR) operations involving UAVs



Syrian Army anti drone/
Electronic Warfare system
23 Apr 17 @withinSyriaBlog

Drone operated by the Desert Hawk brigade of the SAA in use during the Fighting around the Sfarieyh oil field, 11 June 20-16

Source: <https://www.youtube.com/watch?v=hVwhXAKyH7w>

Note: it is the same type of “hobby” drone spotted being used by the Desert Hawks in Latakia, earlier this year (see right)

Islamic State drone operations, June 2016



Sfarieyh oil field
Site of ISIS drone shoot-down by Syrian Army, 11 June 2016

Palmyra region
Site of ISIS drone delivered bomb attack
on Liwa Fatemiyoun SUV, 6-9? June 2016

Site of ISIS drone shoot-down by Syrian Arab Army, 555th Brigade, 11 June 20-16

Source: <https://www.youtube.com/watch?v=hVwhXAkYH7w>

<https://www.almasdarnews.com/article/syrian-army-shoots-isis-drone-west-raqqa-video/>



ISIS drone crashes
In desert near
Sfarieyh



555th Brigade,
AAA gunners
engage ISIS
drone, near
Sfarieyh



Drone wreckage, recovered by 555th
Brigade troops

Sayed Hakim, deputy commander of Liwa Fatemiyoun shia militia, killed in Palmyra region around 9th June 2016, reportedly hit by an "IS suicide drone.

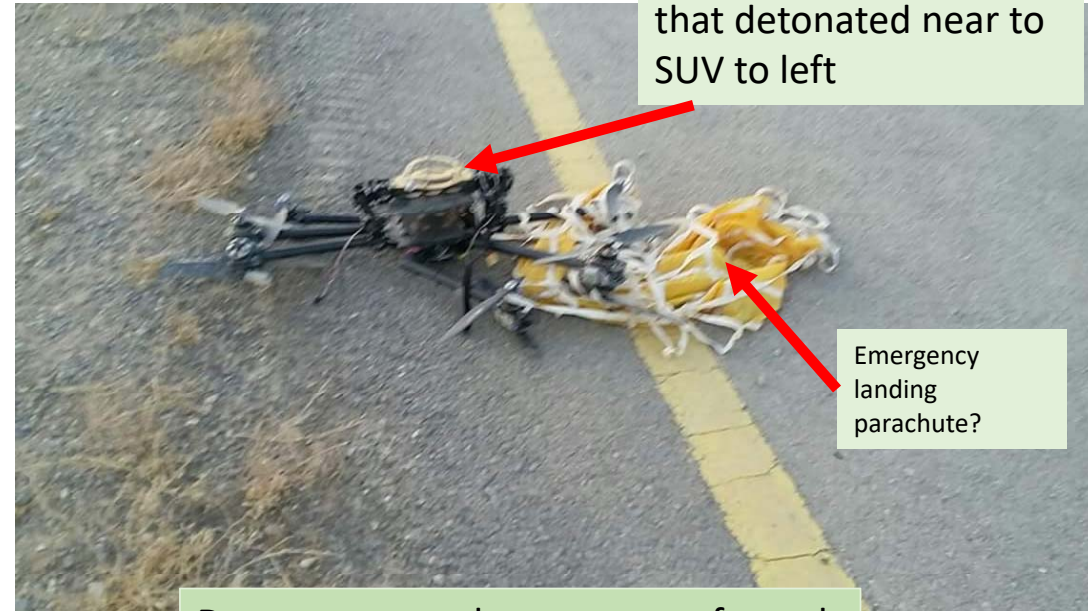
[Source: @green_lemonn Jun 9](#)

Shrapnel damage to SUV, including flat tyres



Body of Sayed Hakim

Net is believed to have contained explosive that detonated near to SUV to left



Emergency landing parachute?

Drone recovered near scene of attack that killed Sayed Hakin
Note: The road markings match with the photo on the left. The drone is upside down