



Serial Bombings Observed at Masyaf, Syria

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Recent media reporting describes an alleged Israeli missile attack against what has been described as part of the Syrian Scientific Studies and Research Center (SSRC or CERS) near Masyaf, Syria, that occurred after midnight on Christmas Eve, December 24, 2020.¹ Acquisition and analysis of satellite imagery by ImageSat International determined that the target of that precision bombardment was a number of buildings, including one revetted building that was likely to have been engaged in the casting of solid rocket motors as part of a larger surface-to-surface missile production facility.² Figure 1 provides an overview of the site as of 2019. Figure 2 shows a close-up of the probable rocket motor casting building before destruction; an ImageSat International image shows the destruction that occurred in the early hours of December 25, 2020. Several other buildings/warehouses were destroyed as well.

This is at least the third such aerial attack against this missile facility since 2017. It is also noteworthy that this facility is within the same site that the Institute had in 2010 linked to the Al Kibar plutonium production reactor following the reactor's bombing by Israel in 2007.³ There is additional reporting suggesting that the SSRC has also been engaged in the development of chemical weapons capable warheads for the missiles produced there.⁴

Open-source researchers had noted satellite imagery evidence of previous major aerial attacks against this Masyaf missile production facility dating to April 12, 2019⁵, and September 2017.⁶ The Institute independently reviewed satellite imagery available on Google Earth and

¹ "Syrian air defenses confront Israeli missile attack in Masyaf," *Asian News International*, December 24, 2020, <https://in.news.yahoo.com/syrian-air-defenses-confront-israeli-023243722.html>

² "Satellite photos: Syria air strike destroyed weapons factory," *Arutz Sheva* 7, December 25, 2020, <https://www.israelnationalnews.com/News/News.aspx/293756>

³ David Albright and Paul Brannan, "Satellite Image Shows Syrian Site Functionally Related to Al Kibar Reactor," *Institute for Science and International Security*, December 1, 2010, <https://isis-online.org/isis-reports/detail/satellite-image-shows-syrian-site-functionally-related-to-al-kibar-reactor/14>

⁴ "Scientific Studies and Research Center," Nuclear Threat Initiative, updated August 17, 2012, <https://www.nti.org/learn/facilities/478/>

⁵ "Missile Strikes Hit Near Masyaf and Homs," *Medium*, April 27, 2019, <https://medium.com/dfrlab/missile-strikes-hit-near-masyaf-and-homs-ae028ebb5bb9> There were reportedly two other sites attacked in the Masyaf/Homs region on April 12, 2019,

⁶ https://twitter.com/fab_hinz/status/1342516074349285377?s=20

determined that there was indeed evidence of at least one other (initial) major aerial sortie against this missile production facility that reportedly occurred on September 7, 2017.⁷ Figure 3 shows the facility before and after the bombing in 2017.

This Masyaf surface to surface missile production facility had previously served as a simple storage depot for army artillery and other military hardware (materiel), and as the Institute previously reported, possibly a storage site for equipment and materials from the Al Kibar reactor, such as nuclear-grade graphite. The site was later expanded beginning in 2010, for unknown purposes, and, by 2016, which expansion included what now appears to have been a missile production line for as yet undetermined type of missile, but one evidently involving solid rocket motors. The probable missile production line was heavily damaged in the first bombing attack in 2017, but was then rebuilt over the next two years (see Figure 4) after which a second bombardment destroyed many of those same rebuilt buildings on April 12, 2019 (see Figure 5).

Russian supplied S-300 and S-400 defensive ground to air missiles began to be deployed near Masyaf in 2018, most likely to provide protective cover against just such attacks.⁸ But according to video reporting, substantiated with additional satellite imagery, a number of other buildings were similarly destroyed at what was labeled as another missile factory near Masyaf on April 12, 2019, evidently a result of a concurrent Israeli missile strike.⁹ That facility is only four kilometers southwest of the Masyaf facility that is the subject of this report. In June 2020, a military Industrial facility, located north of Masyaf was similarly heavily damaged by areal bombardment as borne out with satellite imagery. That military industrial facility is located six kilometers northwest of the Masyaf missile production facility that is the subject of this report. That June bombing was allegedly also the result of an Israeli cruise missile attack.¹⁰ Based on the damage evident on the satellite imagery, it is clear that the air defenses were insufficient to deter these repeated successful attacks against high value strategic targets in Syria.

⁷ Stuart Winer, "Israeli jets said to hit chemical weapons, missile site in Syria," *The Times of Israel*, September 7, 2017, <https://www.timesofisrael.com/israeli-planes-reportedly-hit-chemical-weapons-site-in-syria/> We cannot yet rule out that this facility was attacked again in July 2018. <https://www.timesofisrael.com/israel-jets-said-to-strike-chemical-weapons-site-in-syria/>

⁸ https://www.youtube.com/watch?v=S_GwqpUIDI4

⁹ https://www.youtube.com/watch?v=zsjWGz_pFKA

¹⁰ <https://www.youtube.com/watch?v=5eVykcg7iw>

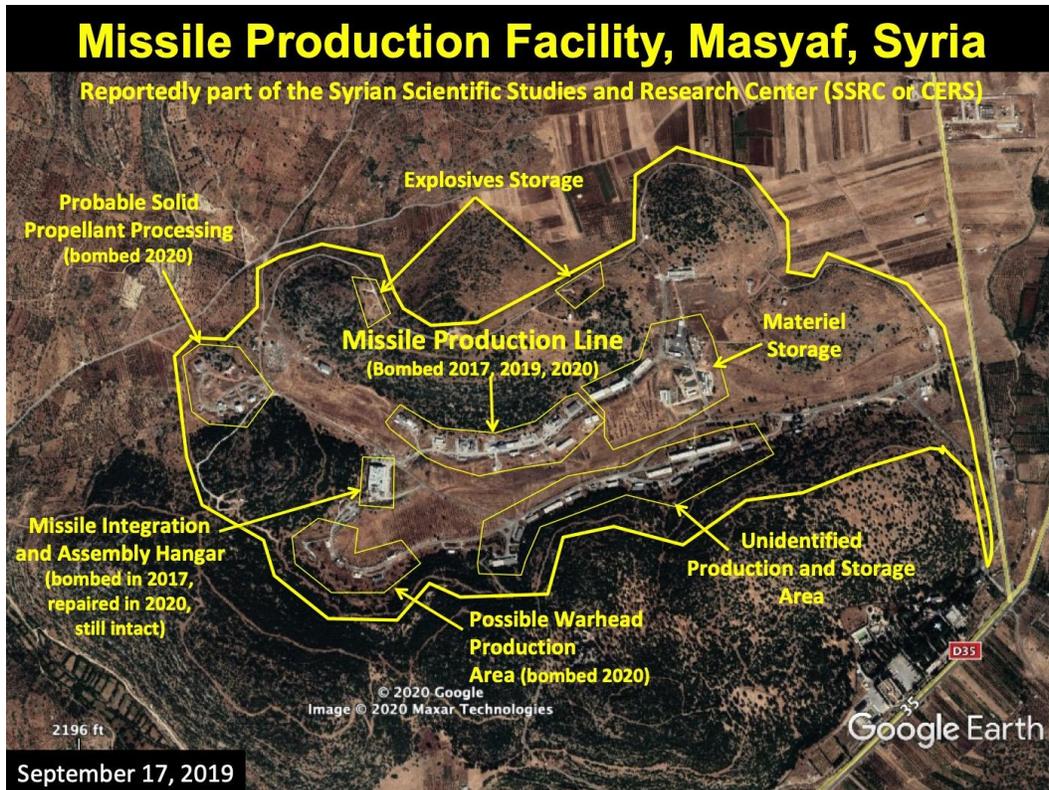


Figure 1. An overview of the Masyaf site, reportedly part of the Syrian Scientific Studies and Research Center and target of a series of air strikes.



Figure 2. A close-up of the probable rocket motor casting building, target of an airstrike in the early hours of December 25, 2020.



Figure 3. A before and after image, top and bottom, respectively, show the site had been targeted by airstrikes before, in September 2017, where multiple buildings were bombed.



Figure 4. The buildings were subsequently rebuilt in 2018.



Figure 5. Several of the buildings were bombed again in April 2019. The damage can still be seen in this September 2019 image.