FAA Threat Analysis Division
Syria-Eastern Mediterranean – Information Note
as of 2 July 2019

Note: This information is provided for situational awareness only and does not constitute an FAA flight advisory or prohibition.

Syria – Long-Range SAM Impacts in Cyprus; Civil Aviation Concern

According to a variety of sources, Syrian air defense operators launched multiple surface-to-air missiles (SAMs) on 30 June 2019 in response to third-party military airstrikes near Damascus and the city of Homs. A long-range SA-5 exited the Damascus Flight Information Region (FIR) (OSTT) and overflew the eastern Mediterranean, with debris impacting in northern Cyprus. According to a statement from officials in northern Cyprus, parts of a Russian-made SA-5 missile landed in northern Cyprus, sparking a large fire. The Turkish Cypriot Foreign Minister noted Turkey assessed the missile likely exploded in flight, with the resulting missile fragments starting the ground fire on impact. This is the first time a Syrian SAM has landed in Cyprus; however, Syrian air defense operators have repeatedly launched long-range SAMs that have flown beyond Syria's territorial airspace, and, in some cases, beyond the boundaries of the Damascus FIR (OSTT). Many errant Syrian SAMs have landed in neighboring countries and the eastern Mediterranean, which may pose a risk to U.S. civil aviation.

Figure 1: Authorities in Cyprus Examine SA-5 Wreckage

The incident began with third-party airstrikes late on 30 June against Iran-linked targets near Damascus and Homs. These strikes involved possible air- and sea-launched munitions. Syrian air defense elements in the vicinity of Damascus and Homs responded by launching several SAMs to intercept inbound aircraft and munitions allegedly being fired from Lebanese airspace. One of the Syrian SA-5 SAMs traveled several hundred kilometers and likely detonated over Cyprus, scattering debris in the vicinity of Tashkent (also known as Vouno), Cyprus, roughly 12km north of Nicosia.

Potential Risk to Civil Aviation:

Over the course of the Syrian conflict, third-party airstrikes in Syrian territory have prompted large-scale air defense responses, including numerous SAM launches. In some cases, Syrian-launched long-range SAMs have traveled beyond the Damascus FIR and impacted in adjoining FIRs. Errant long-range SAMs have landed in Jordan, Lebanon, the eastern Mediterranean, and now in northern Cyprus. Long-range errant SAMs present a potential hazard to civil aviation operating on international air routes in the region, as well as a potential risk to airports. Aircraft, airports and other aviation-related infrastructure could inadvertently be struck by an errant SAM or hit by debris from an in-flight detonation. Maritime traffic, surface transportation, and populated areas are similarly exposed to risk, depending on the range and azimuth of the missile.

A line of bearing connecting Homs (where previous SA-5 activity has been reported) to the SA-5 debris impact point (north of Nicosia) provides a rough estimate of the missile's likely trajectory. At least one civil aircraft was flying over the eastern Mediterranean in relatively close proximity to the SAM's estimated trajectory during the time of the incident, according to on-line flight tracking, demonstrating the potential risk to civil aviation from long-range errant Syrian SAMs. While the missile likely overflew smaller airports in Northern Cyprus, Larnaca International Airport (ICAO code: LCLK) was not in close proximity to the missile's line of flight. The incident underscores the FAA's concerns regarding Syrian air defense fire and the apparent lack of adequate airspace deconfliction measures to ensure the safety of civil aviation in close proximity to missile trajectories, particularly for long-range missiles flying beyond the Damascus FIR.

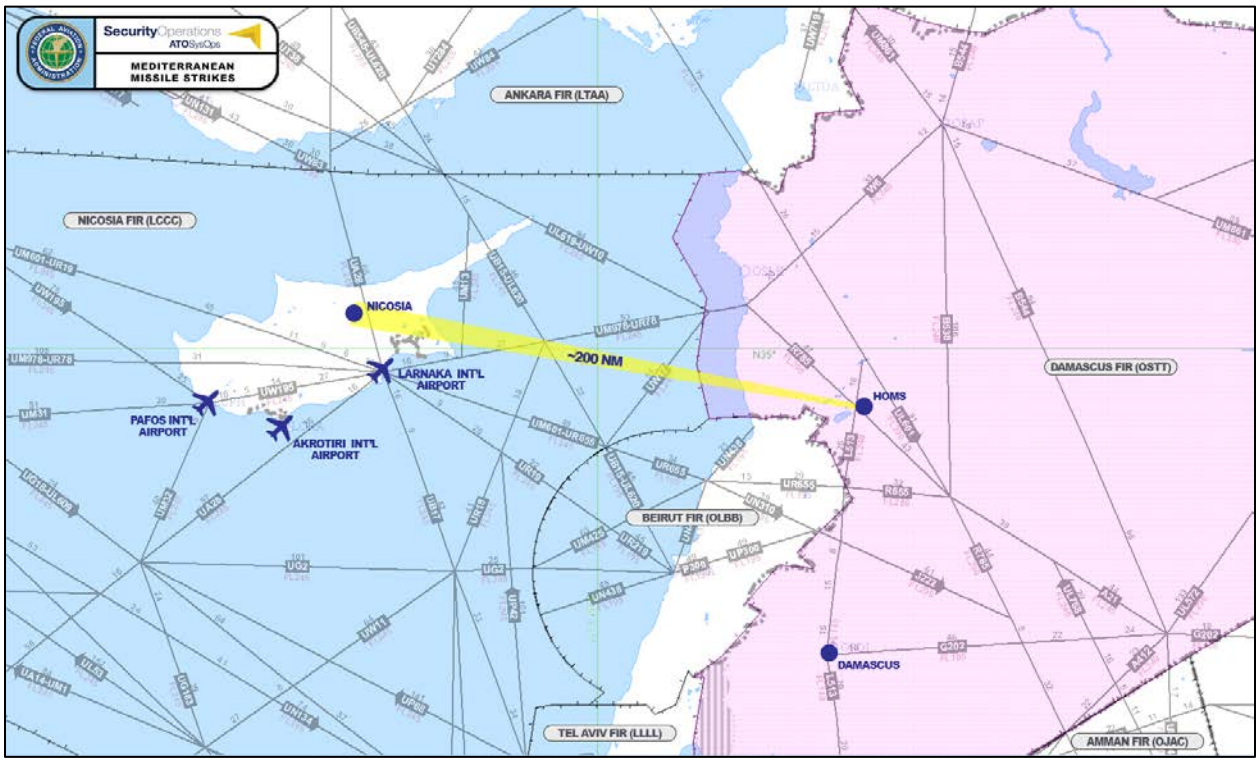
Figure 2: Civil Air Traffic on 30 June in the Vicinity of the Long-Range SAM Launch.

The missile activity on 30 June also demonstrates the continuing risks to civil aviation operations, including overflights, in the Damascus FIR (OSTT). Overflight routes in the Damascus FIR could be in the vicinity of third-party targeted sites and/or be exposed to the trajectories of defensive SAM fire. As described below, the FAA continues to prohibit U.S. civil aviation from operating in the Damascus FIR.

Flight Prohibition for the Damascus FIR (OSTT) and Flight Advisory for Airspace Immediately Adjacent to the Damascus FIR:

As a reminder, Special Federal Aviation Regulation (SFAR) No. 114, 14 C.F.R. § 91.1609, prohibits U.S. civil aviation from operating in the entire Damascus FIR (OSTT) at all altitudes. On 14 April 2018, the FAA issued advisory Notice-to-Airmen (NOTAM) KICZ A0009/18, which remains in effect and advises U.S. civil aviation to exercise caution if operating in the airspace within 200 nm of the Damascus FIR due to military activity in or around Syria. Such military activity might include errant long-range SAMs and electronic interference from GPS and/or communications jamming.. The FAA continues to monitor the situation for any changes in the risk to U.S. civil aviation.

Copies of FAA-issued flight prohibition SFARs, flight prohibition NOTAMs and advisory NOTAMs are posted on the FAA Prohibitions, Restrictions and Notices website at: http://www.faa.gov/air_traffic/publications/us_restrictions/ as a reference. A summary of current FAA-issued NOTAMs and SFARs is also provided as an attachment.



Graphic 2: Approximate SA-5 missile trajectory on 30 June. The Damascus FIR (OSTT) is highlighted in pink. Graphic is for situational awareness and is not to be used for navigation.

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