



Prepared by the Security & Hazardous Materials Safety Organization (ASH)

Russia/Ukraine – Conflict Spillover Risks to U.S. Civil Aviation Increasing

To date, weapons activity in Russia's ongoing invasion of Ukraine has mostly been confined to the geographic scope of the Federal Aviation Administration's (FAA) flight prohibition Notices to Air Missions (NOTAMs) for the conflict. However, Russia's increased use of developmental weapons, use of weapons in nontraditional roles, and long-range missile strikes into western Ukraine increases potential spillover risk concerns for U.S. civil aviation operations in adjacent airspace. Such concerns include the possibility of errant munitions in close proximity to Ukraine's western border.

Russia periodically launches cruise missiles out of the Black and Caspian Seas for strike operations into Ukraine. Russia's expanded attacks on critical infrastructure targets and transportation routes in western and southern Ukraine in close proximity to border areas signals Moscow's willingness to conduct increasingly risky strike operations. This heightens the spillover risk to U.S. civil aviation in airspace outside of the area covered by current conflict-related FAA flight prohibition NOTAMs. Moldovan Defense Minister Anatolie Nosatii reported that since mid-October 2022, several Russian missiles were fired from the Black Sea and subsequently overflew the Republic of Moldova (Moldova) enroute to targets in Ukraine. Additionally, on 31 October, Russia conducted a significant missile attack aimed at degrading critical infrastructure throughout Ukraine. During the attack, a Russian missile was intercepted by Ukrainian air defenses and impacted in Naslavcea, Moldova, a village located near the northernmost point of Moldova and situated 156.5 mi (252 km) from the capital, Chisinau. The point of impact was located within a flight prohibition set forth in a supplement to Moldova's Aeronautical Information Publication (AIP) (AIP Sup 014/2022). Three Russian cruise missiles previously transited this same airspace in Moldova on 10 October and further incidents in this airspace are likely as Russia continues to conduct standoff attacks.

Additionally, communications jamming and Global Positioning System (GPS) interference continues to extend beyond the Federal Aviation Administration's (FAA) flight prohibition NOTAMs for the conflict. Russia deployed significant electronic warfare capabilities to the region and also likely in occupied Ukrainian territory. Civil aircraft flights operating in proximity to the conflict zone or transiting the southern Black Sea or northern Caspian Sea may be inadvertently exposed to potential communications jamming and GPS interference affecting aircraft navigation and communication systems outside the FAA's current NOTAM area. EASA has issued Safety Information Bulletin (SIB) 2022-99 on Global Navigation Satellite System (GNSS) jamming in the Baltic Sea area.

Furthermore, the expansion of UAS use to support operations associated with the conflict, and their extended ranges, also complicates the airspace at lower altitudes and increases the risk for spillover impacts. In late June, a Russian-made Orlan-10 UAS was discovered in eastern Turkey. Although unconfirmed, the UAS likely originated from Russian forces operating in Ukraine. The Orlan-10 has a reported flight ceiling of 16,000 ft (5,000 m). Russia also recently introduced a number of Iranian-made UAS into the conflict, conducting operations from Crimea and occupied areas of eastern Ukraine, highlighting continued risks of errant UAS activity associated with this conflict.

In addition to the FAA's Special Federal Aviation Regulation (SFAR) No. 113, 14 C.F.R. § 91.1607, which prohibits U.S. civil aviation operations in specified areas of the Dnipro Flight Information Region (FIR) (UKDV), as described in the rule, the FAA also maintains three NOTAMs prohibiting U.S. civil aviation operations from surface to unlimited in the following airspace due to safety-of-flight risks associated with the ongoing hostilities:

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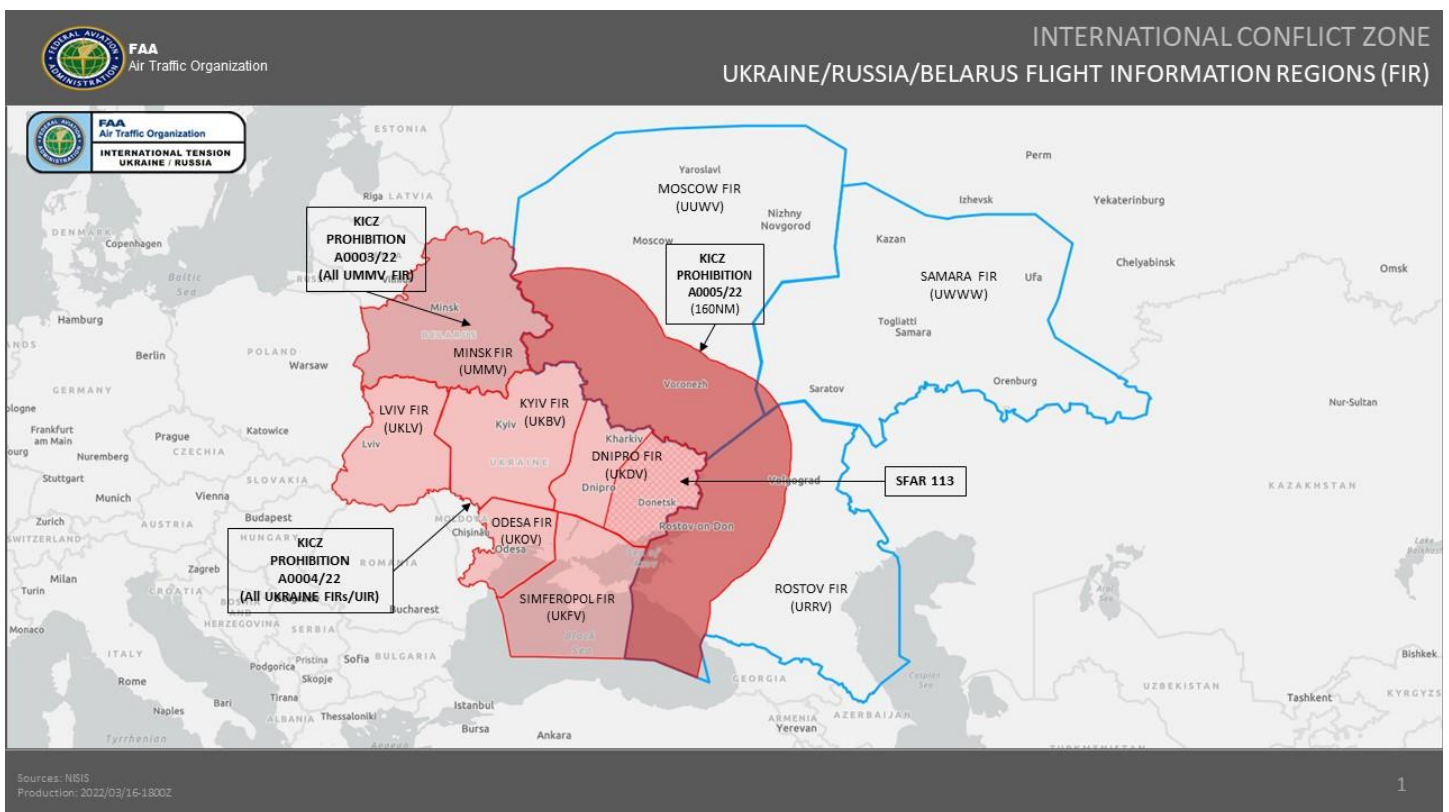
(1) the Minsk FIR (UMMV) [NOTAM KICZ A0003/22];

(2) the Lviv FIR (UKLV), Kyiv FIR (UKBV), Odesa FIR (UKOV), Simferopol FIR (UKFV), Dnipro FIR (UKDV), as well as the Kyiv Upper Information Region (UIR) (UKBU) [NOTAM KICZ A0004/22]; and

(3) the Moscow FIR (UUWV), the Samara FIR (UWWW) and the Rostov-na Donu FIR (URRV) within 160 nm of the boundaries with the Dnipro FIR (UKDV), the Simferopol FIR (UKFV), and the Kyiv FIR (UKBV) (includes that portion of the Kyiv UIR (UKBU) airspace within the lateral limits of the UKDV, UKFV, and UKBV FIRs) [NOTAM KICZ A0005/22].

Copies of FAA flight prohibition SFARs and flight advisory and prohibition NOTAMs for overseas areas are available on FAA's Prohibitions, Restrictions and Notices website:

https://www.faa.gov/air_traffic/publications/us_restrictions/.



**Current FAA SFAR No. 113 and FAA flight prohibition NOTAMs for the region.
This graphic is NOT for navigational purposes.**

If there are any questions, please contact the FAA Threat Analysis Division (AXE-200) at 202-267-3203 or FAA-Watch@faa.gov.

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