



Welcome

Matthew Borie, Chief Intelligence Officer

- Since c.0300 UTC on 24 February, Russian military cross-border strikes into Ukraine *reportedly including the use of over 800 cruise and ballistic missiles followed by airstrikes* have been reported targeting main urban centres outside of Donetsk & Luhansk, to include: Kyiv, Kharkiv, Dnipro, Lviv, Ivano-Frankivsk, Lutsk, Odessa, Kherson, Zaporizhzhia and Mariupol, as well as over 10 additional cities at the very least
- Airports, airbases and/or military installations with aviation infrastructure in many of these Ukrainian cities have reportedly been targeted including within the past 24 hours; however, information on material damage at the facilities including the status of air assets on ground remains unclarified at this time
- Separately, Russian military forces are pressing an invasion along several avenues of approach into Ukraine *including from the south via Crimea axis (where most takeover of territory has occurred)*, east via Donbass axis, northeast via Kharkiv axis, north-central via Kyiv axis and northwest via Belarus axis
- Ukraine military drone or ballistic missile strikes have targeted Russian military airbases in Taganrog & Millerovo, both in Rostov oblast Russian air defences have reportedly shot down a limited number of Ukranian ballistic missiles over Belgorod & Rostov
- Russian naval activity has also been reported in the Black Sea and Sea of Azov since 24 February



Drone crash in Croatia emanating from Russia-Ukraine conflict:

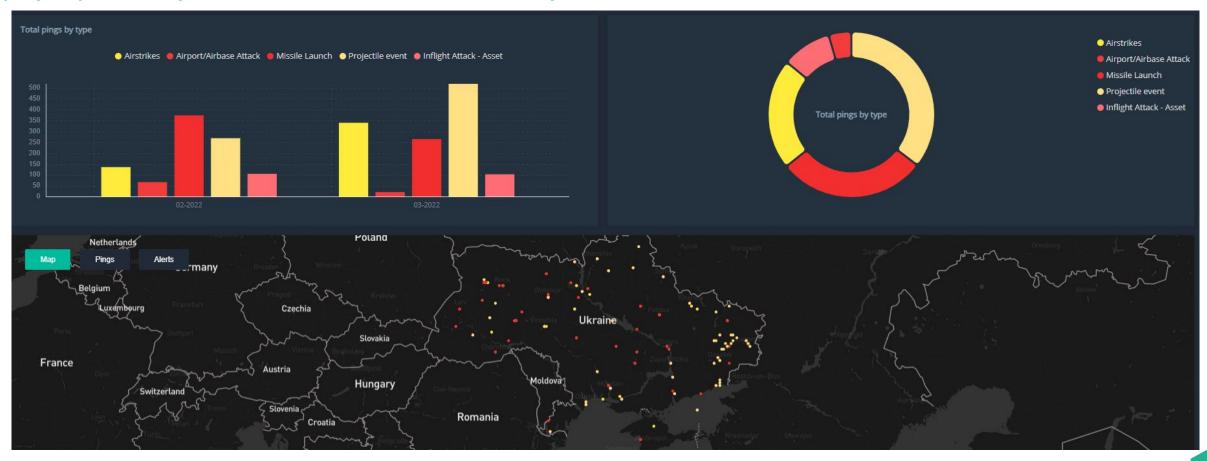
- ➤ On 10 March at c.2200 UTC (2300 local time), a drone of unspecified type crashed in the southwest of the Croatian capital, Zagreb; while buildings and vehicles were damaged on the ground, no injuries have been reported. The Croatian president added that the incident remains under investigation, but was assessed not to have been directed against Croatia.
- The Croatian government has described it as a Russian-made military drone, but that it is unclear whether it was operated by Ukrainian or Russian forces, and that it entered Croatian airspace from Hungary, travelling at 700 km/h at an altitude of 1300m. In a press conference, the Croatian president said that it had come from Ukraine, passing through the airspace of Hungary and Romania. The crash site is located almost 100km from Croatia's border with Hungary, and c.560km from Ukraine (at its closest point).
- ➤ NATO Alliance Statement: "NATO's integrated air and missile defence tracked the flight path of an object which subsequently crashed in Zagreb. The Croatian authorities have announced that they are investigating this incident."



Notional Drone Flight Path: Ukraine-Croatia



Osprey:Explore – Key Events in Ukraine Since 24 February





UK Defence Intelligence – 11 March 2022





Key Developments:

- Russia claims destroying 98 aircraft, 57 helicopters & 118 drones
 - Verified losses of Ukrainian armed forces air assets: 9 aircraft & 4 drones
- Ukraine claims destroying 57 aircraft, 83 helicopters & 7 drones
 - Verified losses of Russian armed forces air assets: 12 aircraft, 13 helicopters & 4 drones
- Russia claims to have destroyed 144 Ukrainian military air-defence systems
 - Verified losses of Ukrainian armed forces air-defence assets: 29 systems
- *Verified losses of Russian armed forces air-defence assets: 56 systems*
- ➤ Analyst Comment: Russia is not assessed to have achieved air superiority over Ukrainian airspace. While degraded, Ukrainian military air & air-defence operations remain ongoing.

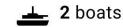
Russia's losses as of March 11

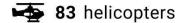
Source: Indicative estimates by Ukraine's Armed Forces as of 10 a.m. EET





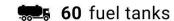






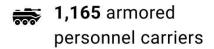


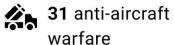












KYIV INDEPENDENT



UK Defence Intelligence – 10 March 2022



UPDATE ON UKRAINE
10 March 2022

INTELLIGENCE UPDATE

- The large Russian column north west of Kyiv has made little progress in over a week and is suffering continued losses at the hands of the Ukrainian Armed Forces.
- There has been a notable decrease in overall Russian air activity over Ukraine in recent days, likely due to the unexpected effectiveness and endurance of Ukrainian Air Defence forces.
- Russia has deployed conscript troops to Ukraine despite previous public assurances from President Putin not to do so. As casualties mount, President Putin will be forced to draw from across the Russian Armed Forces and other sources to replace his losses.



Key Developments: Regulatory, Risk & Operational







Osprey Airspace Risk Areas

Osprey scoring for the relevant Airspace Risk Areas outlined below:

- Ukraine Donetsk & Luhansk: **EXTREME** at all altitudes
- Ukraine (non-Donbass): **EXTREME** at all altitudes (up from HIGH on 23 Feb)
- FIR Simferopol (UKFV): **EXTREME** at all altitudes (up from HIGH on 23 Feb)
- Russian Border: EXTREME at all altitudes (up from HIGH on 23 Feb)
- Belarus: **EXTREME** at all altitudes (up from HIGH on 23 Feb)
- Moldova: **EXTREME** at all altitudes (new on 24 Feb)



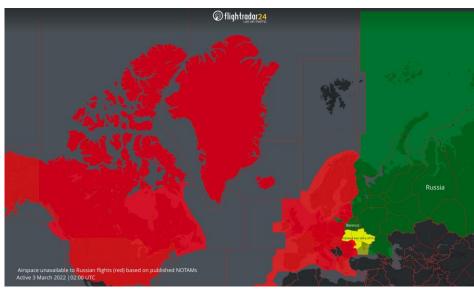
Regulatory Information

- ▶ Ukraine has closed its airspace, currently through 23 March (UKBV A0583/22). Moldova has also closed its airspace except for repositioning, cargo, humanitarian, repatriation & medical emergency flights with permission/coordination of the CAA and using Chisinau Airport only, until 25 April (LUUU A0046/22).
- ▶ Belarus has restricted the southern part of its airspace until 24 March (UMMV 00177/22); Russian NOTAMs close a large portion of its SW airspace, also covering Ukrainian airspace and a large part of Belarusian airspace, as well as numerous ATS route segments in its SW airspace, through 20 March (URRV/UUWV/URFV U0310/0312-0314/22).
- ➤ Poland has issued further flight planning restrictions in the eastern half of the country, and Hungary also has several NOTAMs regarding temporary restrictions related to military activity linked to the Ukraine crisis. Romania has issued daily NOTAMs regarding military patrol flights near its borders with Moldova and Ukraine. Germany has issued a NOTAM warning of reroutings and delays in its airspace due to Ukraine crisis-related military activities (EDGG/EDWW/EDMM B0180/22).
- ➤ Major regulatory bodies including EASA, the UK, the US, Canada, France & Germany have issued conflict zone notices for airspace in Ukraine and neighbouring countries, most with 'buffer zones' around Ukrainian airspace ranging up to 200NM.
- ➤ The EU, the US, the UK, Canada, almost all non-EU European nations and British Overseas Territories have banned Russian-linked aviation entities from using their airspace; Russia has reciprocated, or is expected to, in almost all cases.
- For more details of these notices, please access Osprey:Open via the following link: https://open.ospreyfs.net
- ➤ Eurocontrol compiled NOTAMs related to Russia-Ukraine: https://www.public.nm.eurocontrol.int/PUBPORTAL/gateway/spec/



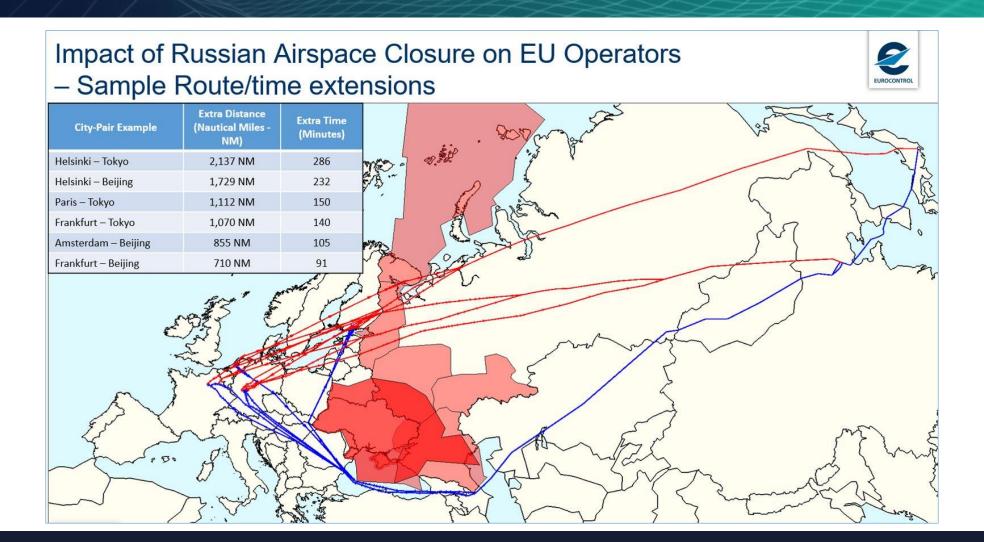
Key Operational Developments:

- ➤ Several foreign aircraft were stranded at airports in Ukraine & Moldova when the airspace was closed; Moldova has since allowed those stuck at Chisinau Airport to leave.
- Airline risk assessments and actual/anticipated reciprocal bans on using Russian airspace for transit have led numerous leading international commercial operators to alter flight routings and cancel services.
- ➤ Routings via Caucasus and Central Asia being used to south/southeast Asia and via North America to East Asia; also further south via ME, Gulf, Saudi Arabia, Iraq and Iran although this would be subject to limitations posed by regulatory notices and other conflict zone activity in certain countries.
- ➤ Russian carriers are limited to over-water routings to the Americas, and a roundabout route through airspace over neutral waters of Baltic Sea to access Kaliningrad. They will also be at risk of repossession attempts instigated by aircraft lessors.

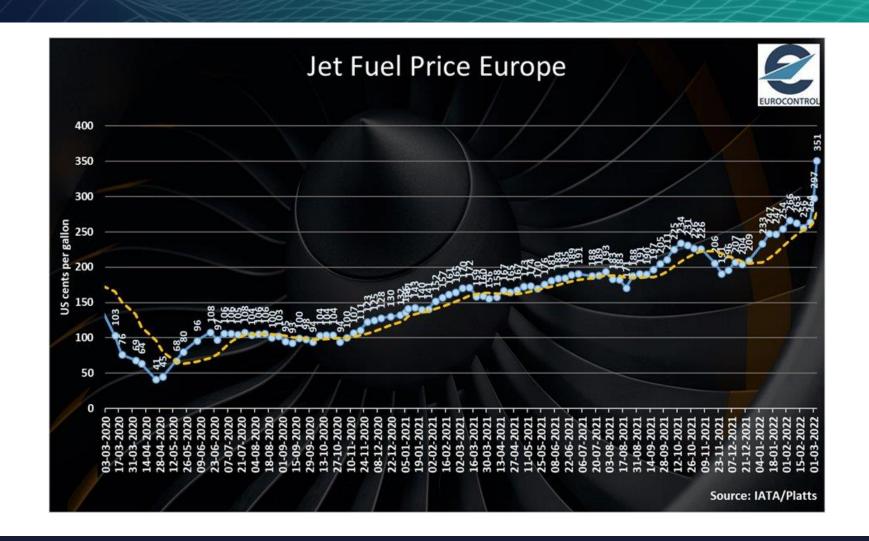


FR24: Airspace Closed to Russian Aviation Entities











Assessment, Indicators & Takeaways





Key Geopolitical Developments:

- ➤ 27 February 10 March: Ukrainian & Russian officials have met for several rounds of talks; no breakthrough towards a ceasefire agreement expected in the near term & humanitarian corridors have been largely ineffective
- Some foreign governments including the US, UK, France & Germany are advising their nationals avoid travel to Russia or depart the country
- ➤ EU plans to finance the purchase and delivery of weapons to Ukraine the first time it has done this. Several NATO countries on an individual basis and not at the direction of the alliance continue to provide military armaments to Ukraine
 - ▶ NATO first-ever activation of the Response Force within the alliance
 - Multinational battlegroup for air defence in Slovakia, with both Germany and the Netherlands deploying Patriot air-defence systems
 - US deployment of Patriot air-defence systems to Poland
 - NATO Baltic & Black Sea air-policing missions ongoing



Osprey Country Risk Areas



Osprey Assessment

The strikes are occurring in the wake of the Russian president stating on 24 February that Russia's armed forces had initiated a "special military operation" against Ukraine to "protect the Donbass" and to "demilitarize" Ukraine. Osprey assesses that significant Russian military operations - likely including the use of cruise and ballistic missiles targeting Ukrainian armed forces bases and critical infrastructure sites in Ukraine, including airports/airbases - are expected to persist through at least the end of March. Ukraine may continue to conduct a limited number of drone, missile and/or rocket launches into Russian territory, though such attacks are likely to occur within 160km (100 miles) of the border.

Increased military air and multi-type/variant missile (air-defence, cruise and/or ballistic) operations by the Russian and Ukrainian armed forces have the potential to cause airspace congestion and would impact the safety of civil aviation flights. The significant increase in the amount of air and missile operations in southwest Russia, Ukraine and the Black Sea are expected to disrupt availability of airports/airbases along with access to airspace in these areas indefinitely. While there are no indications that Russia or Ukraine intends to kinetically target legal civil aviation flights, Osprey assesses there is an increasing potential for miscalculation and/or misidentification.

Rerouting of civil aviation over additional portions of Belarus's FIR Minsk (UMMV) as well as Russia's FIR Moscow (UUWV), FIR Samara (UWWW) and/or FIR Rostov (URRV) along with the eastern portions of German, Polish, Hungarian and/or Romanian airspace is a significant concern going forward, either by further regulatory action and/or changes in insurance coverage. More restrictive measures could be enacted at short notice by these countries as well as other leading civil aviation governing bodies, including additional partial restrictions of airspace in the above FIRs or additional airspace areas over Slovakia and/or Croatia for example. While Ukraine and Moldova have closed their airspace, leading civil aviation governing bodies may issue further notices to their operators in addition to those detailed above regarding Ukrainian and neighbouring airspace.



Key Indicators of Escalation

- ➤ Intensification of Russian strikes on main urban centres, military sites and critical infrastructure in Ukraine
- Significant Russian movement of forces deep into Ukrainian territory and control of main urban centres
- > Additional deployment of further Russian military forces to Belarus or the areas bordering Ukraine
- Widespread telecommunications disruption and/or cyber attacks crippling critical infrastructure functionality

Key Indicators of De-escalation

- Russian willingness to engage in ceasefire negotiations
- Russian strikes being confined to a specific geographic area
- Russian troop movements confined to specific avenue of approach
- ➤ Russia-NATO council engagements on deconfliction



Key Takeaways

Ukraine is an active conflict zone and the airspace is closed – some neighbouring states restricting airspace as well

➤ Both Russia & NATO are conducting increased levels of military air patrols over the Black Sea & Baltic Sea

➤ GPS jamming & other forms of EMI remain present in the region, including the Black Sea & Baltic Sea

> Possible short-notice issuance of regulatory NOTAMs, circulars, publications, restrictions and/or bulletins

> Potential change in insurance coverage and/or access to such services for flights related to Ukraine conflict



