

Osprey Flight Solutions A new age for aviation risk management

14 February 2022 **Russia-Ukraine Situation Update**





Welcome

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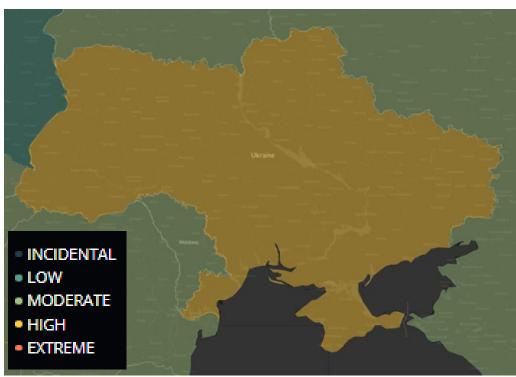
Tensions remain high between Ukraine and Russia over Russian military deployments into Belarus, as well as to the Crimea, Voronezh oblast, Rostov oblast and Krasnodar Krai, located adjacent to the eastern Ukrainian regions of Donetsk and Luhansk. The US, UK, EU and NATO have all made statements in support of Ukraine and called on Russia to avoid escalating the situation along the border. Meanwhile, Russia has accused Ukraine of inflaming the conflict in Donetsk and Luhansk, while accusing NATO of conducting increased levels of air and naval activity in the Black Sea in the past three months.

Divisive public statements by officials from the Russian, Ukrainian and Western governments have played a notable part in inflaming tensions. The recent security talks between Russia, Ukraine and Western governments have failed to alleviate tensions and though Osprey views the diplomatic engagements to be a positive step aimed at de-escalating the situation, they have thus far been fruitless. 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. The airspace operational situation over portions of Ukraine, Russia and the Black Sea remains fluid and subject to rapid change.



Key Diplomatic Developments:

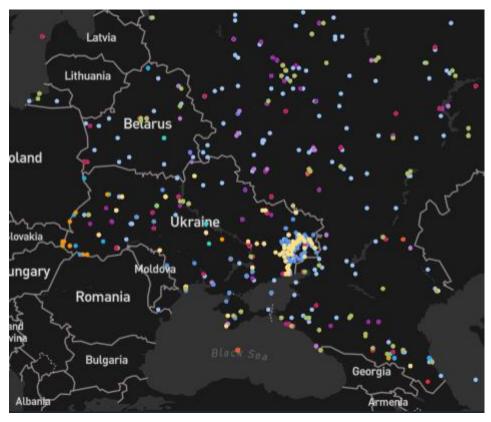
- Serman Chancellor visits to Ukraine & Russia
- Ukraine has requested a meeting with Russia under the Minsk Agreement Vienna Document
- Numerous foreign governments including the US, UK, Germany, Belgium and the Netherlands - are advising their nationals to defer travel to Ukraine or depart the country
- Several governments decreasing diplomatic staff within Ukraine, with some moving consular operations from Kyiv to Lviv





Key Operational Developments:

- Ukrainian State Air Traffic Service Enterprise (UkSATSE): "The airspace over the territory of Ukraine is currently open and accessible for flight planning. Flight safety is ensured at the appropriate level in accordance with international norms and standards."
- ▶ KLM, Norwegian & British Airways reportedly avoiding Ukrainian airspace
- Several leading international commercial airlines have reportedly altered flight routings and/or timings in Ukrainian airspace regarding overflights
- Multiple leading international air carriers have reportedly stopped conducting overnight stops at airports in Ukraine



Osprey:Explore Data – Russia, Ukraine & Belarus



Key Insurance Developments:

- I3 February SkyUp Airlines <u>statement</u>: "On February 12, 2022, the world's largest insurance companies informed Ukrainian air carriers that in 48 hours they would stop insuring aircraft for flights in Ukrainian airspace. This decision is associated with increased risks of military invasion."
- ➤ 14 February Ukrainian International Airlines <u>statement</u>: "Due to the foreign policy situation, Ukraine International Airlines (UIA) has received an official notification from insurance companies to terminate the insurance of aircraft for flights in the airspace of Ukraine."
- Analyst comment: Rerouting of civil aviation over Ukraine's FIR Dnipro (UKDV), FIR Simferopol (UKFV), FIR Kyiv (UKBV) and UIR Kyiv (UKBU) as well as in portions of Russia's FIR Moscow (UUWV) and parts of FIR Rostov (URRV) is a significant concern going forward - either by regulatory action and/or changes in insurance coverage. Operators should remain prepared a short-notice loss of access to portions or the entirety of the above FIRs in the near term.



Key military developments - Russia

- ▶ Russian exercises in Belarus are set for 9-21 February
 - S-400 conventional surface-to-air missile (SAM) systems deployed
 - ▶ Su-35 fighter jet & Su-25 combat aircraft deployed
 - Iskander short-range ballistic missiles (SRBMs) deployed
- ▶ Russian military nuclear forces exercise expected in February
- **•** Russian Navy exercise in the Black Sea to run through 19 February

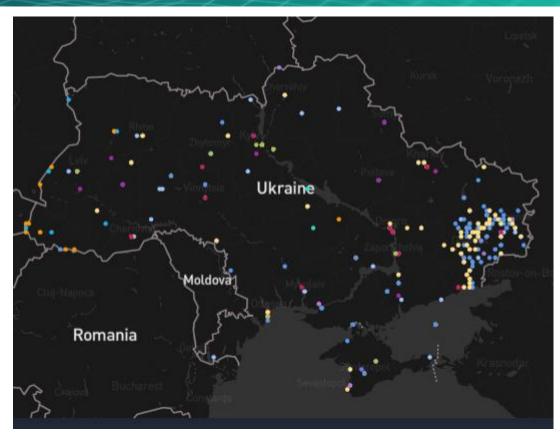
- Over 130,000 forces deployed in areas near Ukraine, more en route
- > Naval assets with Kalibr cruise missiles deployed in Black Sea
- Increased transport aircraft activity in past two weeks
- New military helicopter & Iskander deployments near Ukraine
- Additional S-400 & S-300V deployed by Russia near Ukraine
- Bastion-P & Bal-E coastal defence missiles deployed to Crimea
- ▶ Multiple launch rocket systems, heavy artillery & mortar units deployed

Analyst comment: Osprey assesses the above to represent the largest mass mobilisation of military forces in the history of the Russian Federation. The Russian military has the ability to conduct a full or partial invasion of Ukraine via multiple avenues of approach as well as the capacity to carry out long-range fires via offensive strike assets without entering Ukrainian territory. Such activity could happen at any point and with little to no warning within the next six weeks.



Key military developments - Ukraine

- Several NATO countries have provided defensive weapons to Ukraine
 - > Anti-tank guided missiles (ATGMs)
 - ► Man-portable air-defence systems (MANPADS)
 - ▶ Artillery & mortar ammunition
 - Drones
- > Ukrainian military air defences deployed in Donetsk & Luhansk province
- > Ongoing Ukrainian military exercises to run through 20 February
- Significant increase in ISR air patrols over the Black Sea over past 3 months



Osprey:Explore Data - Ukraine

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Regulatory Information

- Canadian & Italian NOTAMs advise their operators to "take all potential risk into account in risk assessment and flight planning decisions when operating" in FIR Kyiv (UKBV), FIR Lviv (UKLV) and FIR Odesa (UKOV) (CZYZ G0153/22 & LIRR A0971/22).
- US FAA NOTAM advises US-registered operators to use "extreme caution" when conducting flights in Russia's FIR Moscow (UUWV) and FIR Rostov (URRV) within 100NM of Ukraine's FIR Dnipro (UKDV), FIR Simferopol (UKFV/URFV) and FIR Kyiv (UKBV) (KICZ A0012/21).
- Airspace control issues in FIR Simferopol (UKFV/URFV) over the Black Sea represent ongoing civil aviation safety-of-flight concerns, as evidenced by advisories issued by EASA, as well as UK, Canadian, Italian and French civil aviation authorities (France AIC A 18/21, UK AIP ENR 1.1 Section 1.4, Canada NOTAM CZYZ G0153/22, Italian NOTAM LIRR A0971/22).
- EASA, along with the US, UK, Canada and French civil aviation authorities, have issued advisories for FIR Dnipro (UKDV) airspace, which includes Donetsk and Luhansk provinces of eastern Ukraine.
- ▶ For full details of these notices, please access Osprey:Open via the following link: https://open.ospreyfs.net





Osprey scoring for the relevant Airspace Risk Areas outlined below:

- Ukraine Donetsk & Luhansk: EXTREME at all altitudes
- Ukraine (non-conflict): **HIGH** at all altitudes (up from MODERATE on 11 Feb)
- FIR Simferopol (UKFV): HIGH at all altitudes (up from MODERATE on 11 Feb)
- Russian Border: **HIGH** at all altitudes (up from MODERATE on 11 Feb)
- Belarus: **HIGH** at all altitudes (up from MODERATE on 11 Feb)

Osprey scoring for the relevant Airports outlined below:

- All Russian airports remain at **MODERATE** risk
- All Ukraine airports now at **HIGH** risk (Kyiv & Odessa up from MODERATE on 11 Feb)

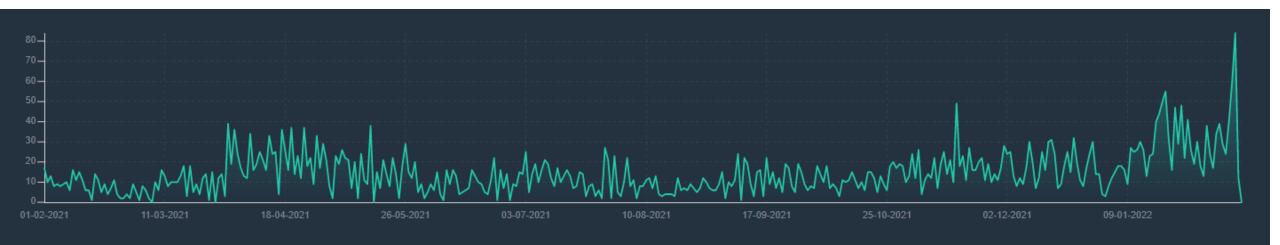


Osprey System Data Analytics





Ukraine: Conventional Military & Conflict Zone Activity



The above graph shows conventional military activity within Ukraine over the past 12 months. The data shows that there has been a spike in the past week that indicates unprecedented levels of activity.



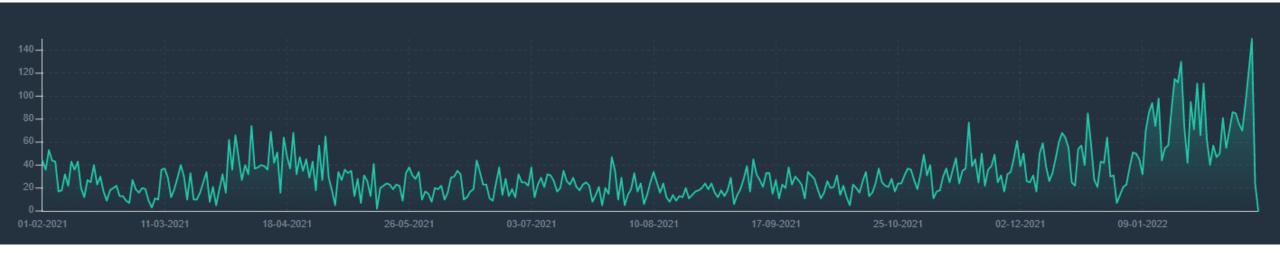
Russia: Conventional Military Activity



The above graph shows conventional military activity within Russia over the past 12 months. The data shows that there has been a trend in the past six weeks that indicates an escalation to unprecedented levels.



Russia-Ukraine: Conventional Military Activity



The above graph shows conventional military activity within Russia and Ukraine over the past 12 months. The data shows that there has been a spike in the past week that indicates a severely deteriorating situation.



Osprey Assessment

Osprey cannot independently verify the accuracy of media reporting from 11 February in the US, UK and Germany that a Russian invasion of Ukraine could start as early as the middle of this week, with a date of 16 February referenced in the reporting. However, based on several Western governments advising against travel to Ukraine, the escalating number/type of Russian military offensive forces deployed, increased transport and combat air asset movements, and the stationing of advanced conventional SAM systems in all areas along the Ukrainian border, Osprey assesses that a full or partial invasion of Ukraine by Russia - via the Voronezh route, via Crimea and the Black Sea (with the possible use of Transnistria as well) and/or through Belarus - to be likely in the first quarter of 2022.

Russia may pursue lower-cost options such as providing additional support to pro-Russian militia forces in eastern Ukraine to inflame the conflict in Donetsk and Luhansk during the first three months of the year. Osprey assesses such actions would be coupled with covert Russian efforts to destabilise the Ukrainian provinces of Dnipropetrovsk, Kherson and Zaporizhzhia as well as the Sea of Azov area. In addition, limited Russian military cross-border kinetic strikes against Ukrainian military forces and/or critical infrastructure, without Russian military ground or air units crossing into the physical territory of Ukraine, remain a credible outlier scenario in the first quarter of 2022.



Key Takeaways

- > Donetsk-Luhansk area of Ukraine remains an active conflict zone with NOTAMs in place prohibiting flight operations
- ▶ Both Russia & Ukraine claim control of FIR Simferopol (UKFV/URFV) airspace over the Black Sea
- ▶ Both Russia & NATO are conducting increased levels of military air patrols over the Black Sea
- Section GPS jamming & other forms of EMI remain present in the region, including the Russia-Ukraine border and Black 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 to/over Ukraine



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