



Osprey Flight Solutions

# A new age for aviation risk management

7 February 2022

## Russia-Ukraine Situation Update



## Welcome

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Tensions remain high between Ukraine and Russia over Russian military deployments into Crimea, as well as to the 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.

The airspace operational situation over portions of Ukraine, Russia and the Black Sea remains fluid and subject to rapid change.



# Russia-Ukraine Situation Update

## Several diplomatic events in the coming weeks are set to occur:

- French Presidential visit to Moscow for talks with Russian leaders
- Visit by German leader to USA to meet with US President
- French, US & Ukrainian leaders meeting to discuss crisis
- Normandy 4 meeting between Russia, Ukraine, Germany & France
- European Foreign Ministers meeting to discuss Russia-Ukraine tensions



# Russia-Ukraine Situation Update

## Key military developments - Russia

- Over 130,000 Russian forces deployed within areas near Ukraine
- Russian exercises in Belarus are set for 9-21 February
  - S-400 conventional surface-to-air missile (SAM) system deployed
  - Su-35 & Su-25 combat aircraft deployed
  - Iskander short-range ballistic missiles (SRBMs) deployed
- Russian nuclear forces exercise expected in February – moved up from Autumn 2022
- Increased Russian transport aircraft activity observed in past week in west of country
- Increased Russian military helicopter & Iskander SRBM deployments near Ukraine & in Crimea
- Additional S-400 & S-300V conventional SAM systems deployed by Russia near Ukraine



# Russia-Ukraine Situation Update

## 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
  
- ✦ Significant increase in ISR air patrols over the Black Sea over past 3 months



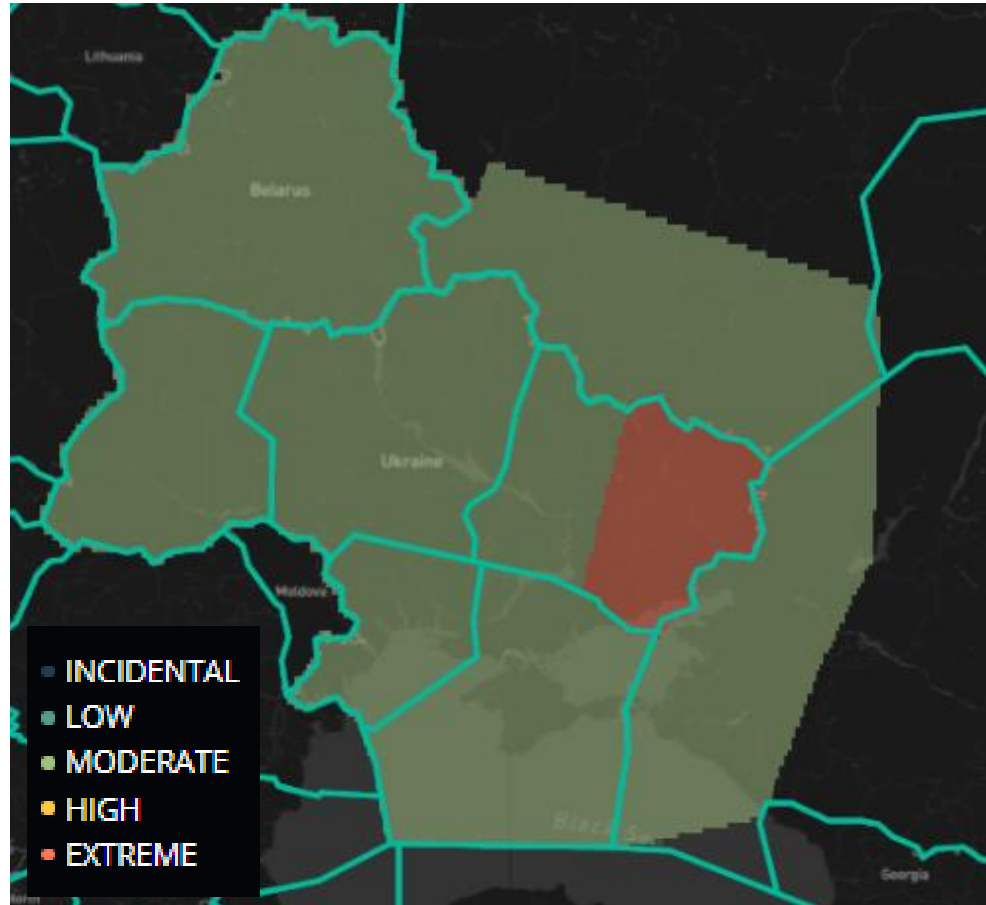
# Russia-Ukraine Situation Update

## Regulatory Information

- ✦ US FAA issued a NOTAM advising 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 and French civil aviation authorities (France AIC – A 18/21, UK AIP ENR 1.1 Section 1.4, Canada NOTAM CZZY G0061/22).
- ✦ EASA, along with the US, UK and French civil aviation authorities, have issued advisories directing that all flights be deferred within the airspace over 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>



# Russia-Ukraine Situation Update



## Osprey scoring for the relevant Airspace Risk Areas outlined below:

- Ukraine - Donetsk & Luhansk: EXTREME at all altitudes
- Ukraine (non-conflict): MODERATE at all altitudes (up from LOW in November)
- FIR Simferopol (UKFV): MODERATE at all altitudes (up from LOW in November)
- Russian Border: MODERATE at all altitudes (up from LOW in November)
- Belarus: MODERATE at all altitudes

## Osprey scoring for the relevant Airspace Risk Areas outlined below:

- All Russian airports remain at MODERATE risk
- For Ukraine, Kyiv-area & Odessa airports remain at MODERATE risk
- All other Ukraine airports remain at HIGH risk

# Russia-Ukraine Situation Update

Osprey System Data Analytics





# Russia-Ukraine Situation Update

## Ukraine: Donetsk-Luhansk Conflict Zone Ceasefire Violations

Total country pings over time

Monthly ▾



The above visualisation shows rocket, mortar and artillery fire in eastern Ukraine since 2019. The data indicates that such activity has risen since late 2020 through 2021 but is below levels observed in 2019 through mid 2020. Historically low levels have been observed in 2022.

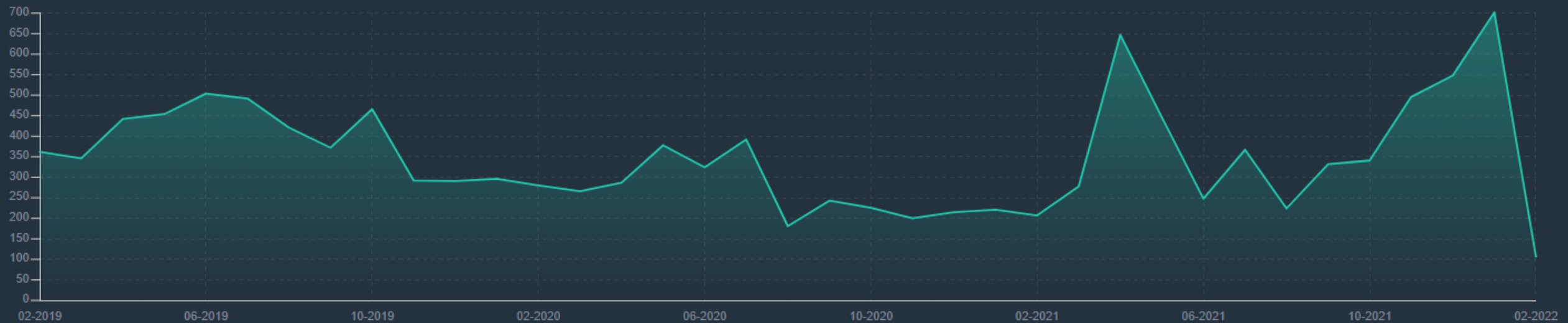


# Russia-Ukraine Situation Update

## Ukraine: Conventional Military & Conflict Zone Activity

Total country pings over time

Monthly ▾

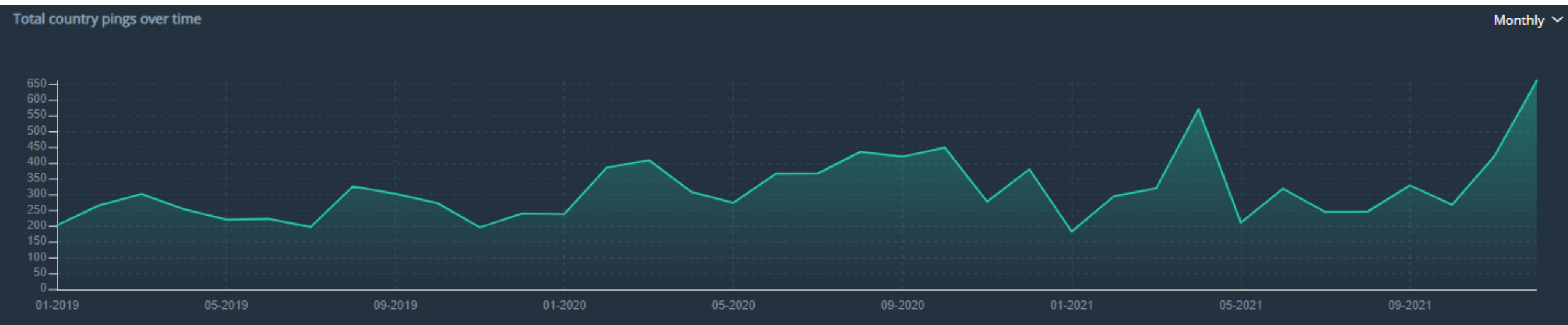


The graph above represents conventional military activity and conflict zone dynamics within Ukraine since 2019 through 2021. The data indicates that there has been a spike in such activity in the past 3 months; previous increased levels of activity occurred in April 2021 and during most of 2019.



# Russia-Ukraine Situation Update

## Russia: Conventional Military Activity



The visualisation above shows conventional military activity within Russia between 2019 and 2021. The data indicates that there has been a spike in such activity in the past 3 months; previous increased levels of activity occurred in April 2021 and during the summer of 2020.



# Russia-Ukraine Situation Update

## Russia-Ukraine: Conventional Military Activity



The above graph shows conventional military activity within Russia and Ukraine between 2019 and 2021. The data indicates that there has been a spike in such activity in the past 3 months; previous increased levels of activity occurred in April 2021.



# Russia-Ukraine Situation Update

## Osprey Assessment

The recent and planned security talks between Russia, Ukraine and Western governments are not expected to fully alleviate tensions, though Osprey views the diplomatic engagements to be a positive step aimed at de-escalating the situation. While the true intentions of the Russians and the Ukrainians are opaque, heightened levels of military training are continuing in concert with complex diplomatic engagements. Some of the traditional media reporting on the situation in eastern Ukraine has overstated the levels of armed conflict occurring at present in Donetsk and Luhansk provinces. In addition, while the Russian military activity along the borders with Ukraine has reached historically high levels in size, the scope of what actions the deployments by Moscow will entail remains up for debate. Divisive public statements by officials from the Russian, Ukrainian and Western governments have also played a notable part in inflaming tensions.

Based on the increased number of Russian military forces deployed, increased air transport activity, combat aircraft movements and the stationing of advanced conventional SAM systems in all areas along the Ukrainian border, Osprey now assesses that a full or partial invasion of Ukraine by Russia - from the north via the Voronezh route, the south via Crimea and eastern Black Sea or the west through Belarus (with the possible use of Transnistria as well) - to be a realistic possibility in the first quarter of 2022. However, 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, coupled with covert 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.





# Russia-Ukraine Situation Update

## 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
- 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



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