# FOR INTERNATIONAL AVIATION, RUSSIA-UKRAINE WAR USHERS IN AN ERA OF COST, RISK, AND UNCERTAINTY

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Russia's February 2022 invasion of Ukraine precipitated a set of dramatic challenges to international air services and aviation governance. With a geographic position astride key great-circle routes and status as home to major passenger and cargo air carriers, Russia wields significant influence in the civil aviation world. Nonetheless, International Civil Aviation Organization (ICAO) member states expressed their displeasure about Russia's violation of Ukrainian sovereignty and subsequent flouting of international aviation norms by voting Russia out of its position as an ICAO Council "state of chief importance in air transport" in October 2022. Meanwhile, tit-for-tat airspace bans by Western states and Russia since the start of the war have distorted international air services markets even as post-COVID resumption of travel has generated rising demand. Russian actions—including the "theft" and continued operation of hundreds of Western-owned airliners—raise difficult questions in the longer term about the rules and assumptions that underpin international cooperation on air connectivity and aviation safety. Despite these political and legal complexities, the importance of Russia's airspace for international air services connecting Asia, Europe, and the Americas will likely drive aviation interests in both the West and Russia to press their governments to begin restoring Russia's status vis-à-vis international aviation at the earliest possible moment.

Russian forces' advance into Ukraine in February 2022 created an immediate disturbance in international air services. In addition to suspended services to Ukraine itself, many air carriers' home governments issued notices to air missions (NOTAMs)—aviation safety notices—prohibiting their flagged aircraft from overflying Ukraine and adjacent regions of Russian territory. These NOTAMs reflected tragic lessons learned from the loss of Malaysia Airlines flight 17 to a Russian surface-to-air missile fired from occupied Ukrainian territory in 2014. Many major air carriers had already stopped overflying neighboring Belarus

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in response to the Belarussian government's interception of a Ryanair flight in 2021 in order to detain a journalist who was on board.<sup>2</sup> Combined with restrictions on commercial overflights of Iran and the suspension of air traffic services in Afghan airspace following the August 2021 Taliban conquest, many air carriers suddenly faced a narrowed set of viable route options for profitable east-west passenger and cargo services connecting Asia, Europe, and the Americas.

On the ground, as well, Russia's invasion had immediate aviation-related impacts. Russian forces moved on the Ukrainian capital with an air assault targeted at an airport in Hostomel, northwest of Kyiv.<sup>3</sup> The airport, though not Kyiv's busiest,<sup>4</sup> is significant as the home of Ukraine's best-known aerospace company, Antonov, maker and operator of heavy-lift cargo aircraft.<sup>5</sup> Though some of Antonov's fleet had evacuated, the world's largest cargo aircraft, the one-of-a-kind Antonov An-225 *Mriya* ("dream"), remained at Hostomel and was destroyed in the crossfire between Russian troops and defending Ukrainians.<sup>6</sup> Amid the chaos and tragedy of the war's outbreak, images of the destruction of the massive *Mriya* made global headlines, and Ukrainian President Volodymyr Zelensky vowed to rebuild the aircraft as a symbol of Ukraine's resilience.<sup>7</sup>

Within days of the start of the war, Western states began imposing restrictions on Russian flights in their airspace. As neighboring countries closed to Russian traffic, the array of denied airspace to Russia's west eliminated a substantial part of Russian air carriers' pre-2022

<sup>2.</sup> Anton Troianovski & Ivan Nechepurenko, Belarus Forces Down Plane to Seize Dissident; Europe Sees 'State Hijacking,' N.Y. TIMES (May 26, 2021), https://www.nytimes.com/2021/05/23/world/europe/ryanair-belarus.html.

<sup>3.</sup> Liam Collins, Michael Kofman & John Spencer, *The Battle of Hostomel Airport:* A Key Moment in Russia's Defeat in Kyin, WAR ON THE ROCKS (Aug. 10, 2023), https://warontherocks.com/2023/08/the-battle-of-hostomel-airport-a-key-moment-in-russias-defeat-in-kyiv.

<sup>4.</sup> Kyiv Boryspil International Airport Profile, CAPA, https://centreforaviation.com/data/profiles/airports/kyiv-boryspil-international-airport-kbp (last visited Nov. 8, 2023).

<sup>5.</sup> Gostomel Antonov Airport Profile, CAPA, https://centreforaviation.com/data/profiles/airports/gostomel-antonov-airport-gml (last visited Nov. 8, 2023).

<sup>6.</sup> Jack Guy, World's Largest Plane Destroyed in Ukraine, CNN (Feb. 28, 2022, 4:51 AM),

https://www.cnn.com/travel/article/antonov-an-225-largest-plane-destroyed-ukraine-scli-intl/index.html.

<sup>7.</sup> Andrew E. Kramer, Restoring a Giant Plane: Ukrainian Resilience or Folly?, N.Y. TIMES (Mar. 27, 2023), https://www.nytimes.com/2023/03/27/world/europe/ukraine-giant-plane-mriya.html.

international route structures.<sup>8</sup> For Russian-owned cargo carrier Air-BridgeCargo, a major player in the COVID-era global air cargo market, the combination of airspace closures and Western sanctions led to complete suspension of operations.<sup>9</sup> Russian heavy-lift cargo carrier Volga Dnepr, a frequent airlift provider to NASA and the U.S. aerospace industry,<sup>10</sup> similarly lost much of its pre-invasion business, continuing to fly only a fraction of its former services. As sanctions mounted, international airline alliances OneWorld and SkyTeam, which facilitate commercial cooperation between air carriers, suspended their Russian members.<sup>11</sup> Airspace bans and economic sanctions eventually all but eliminated the presence of Russian air carriers in the Western Hemisphere.<sup>12</sup>

The impacts of airspace bans and sanctions on Russian passenger and cargo carriers were dramatic, but Russia's response to Western measures generated even more seismic shifts in global air services. For many international air carriers in Asia, Europe, and the Americas, the ability to overfly Russian territory is more important than access to markets within Russia. Russia's vast territory sits astride great circle routes—that is, the shortest geographic routes connecting pairs of points on the globe—between key destinations in the Eastern and Western Hemispheres via the Arctic. Without Russian overflight permissions, carriers connecting, for instance, Shanghai and New York or

<sup>8.</sup> E.U. routes accounted for over 40 percent of Russian scheduled passenger traffic as of 2016. Panayotis Christidis, Four Shades of Open Skies: European Union and For Main External Partners, 50 J. TRANSP. GEOGRAPHY 105, 111 (2016).

<sup>9.</sup> Russia's Biggest Cargo Airline to Suspend All Boeing Flights, REUTERS (Mar. 18, 2022), https://www.reuters.com/business/aerospace-defense/russias-biggest-cargo-airline-suspend-all-boeing-flights-2022-03-18.

<sup>10.</sup> See, e.g., Upper Stage Delivered, NASA (June 21, 2011), https://www.nasa.gov/image-article/upper-stage-delivered (Volga-Dnepr cargo plane delivering part of an Atlas V rocket to Cape Canaveral); Volga-Dnepr Moves Atlas 5 Booster, BREAKBULK (June 12, 2020), https://breakbulk.com/Articles/volga-dnepr-moves-atlas-5-booster (delivering rocket booster from Alabama to Cape Canaveral for Mars mission).

<sup>11.</sup> David Kaminski-Morrow, S7's Participation in OneWorld Alliance Temporarily Suspended, FLIGHTGLOBAL (Apr. 20, 2022), https://www.flightglobal.com/airlines/s7s-participation-in-oneworld-alliance-temporarily-suspended/148320.article; SkyTeam and Aeroflot Have Agreed to Temporarily Suspend the Airline's SkyTeam Membership, SKYTEAM (Apr. 27, 2022), https://www.skyteam.com/en/about/press-releases/press-releases-2022/skyteam-and-aeroflot.

<sup>12.</sup> Russian air carriers continue to operate a small number of routes to Cuba and Venezuela. These flights avoid denied airspace by detouring north of Scandinavia and proceeding through international airspace over the Barents Sea, the Norwegian Sea, and the North Atlantic. Flight tracking data on Nordwind and Rossiya Airlines, FLIGHTRADAR24, www.flightradar24.com (last visited Nov. 29, 2023).

Mumbai and Chicago must fly indirect, dramatically elongated routes that stretch aircraft ranges, thin profit margins, and render some city pairs commercially unviable. Russia had leveraged its strategic location for years before the Ukraine invasion; in the aftermath of the 2022 invasion and subsequent airspace closures, only a handful of major international carriers—those hailing from countries that maintained ties and cooperation with Moscow—have maintained the ability to traverse Russia's prized overflight routes.

## SITTING UNDER A GOLDMINE: RUSSIA LEVERAGES ITS COVETED AIRSPACE

The 1944 Chicago Convention on International Civil Aviation enshrined states' exclusive sovereignty over the airspace above their territories. The Chicago Convention also defined five "freedoms of the air" relating to the ability of foreign-flagged aircraft to fly through a state's sovereign airspace. The first and second freedoms, known as the "transit freedoms," refer, respectively, to nonstop overflight and overflight with only a technical stop (a stop during which no revenue passengers or cargo is on- or off-loaded). Also in 1944, states formed a multilateral convention, the International Air Services Transit Agreement (IASTA), pledging to extend transit freedom rights to other contracting states' aircraft. There are now 135 states parties to IASTA, but Russia is not among them. Instead, for decades leading up to its February 2022 invasion of Ukraine, Russia leveraged its sought-after

lishRecord=True&HasFrenchRecord=True&HasSpanishRecord=True ("Canada withdrew from this agreement in 1988 for reasons related to the ability to control its vast airspace and to obtain obligations from its bilateral partners.").

<sup>13.</sup> Convention on Int'l Civ. Aviation art. 1, Dec. 7, 1944, 61 Stat. 1180, 15 U.N.T.S. 295, https://www.icao.int/publications/pages/doc7300.aspx.

<sup>14.</sup> Freedoms of the Air, ICAO, https://www.icao.int/pages/freedomsair.aspx (last visited Nov. 16, 2023).

<sup>15.</sup> International Air Services Transit Agreement, Dec. 7, 1944, 84 U.N.T.S. 389, https://treaties.un.org/doc/Publication/UNTS/Volume%2084/volume-84-II-252-English.pdf.

<sup>16.</sup> List of states parties to the International Air Services Transit Agreement, ICAO, https://www.icao.int/secretariat/legal/list%20of%20parties/transit\_en.pdf (last visited Dec. 21, 2023). Canada also withdrew from IASTA in order to extend overflight rights through bilateral agreements. World Trade Organization Council for Trade in Services, Report of the Third Session of the Review Mandated Under Paragraph 5 of the Air Transport Annex Held on 9 October 2001, ¶ 24, WTO Doc. S/C/M/57, https://docs.wto.org/dol2fe/Pages/FE\_Search/FE\_S\_S009-DP.aspx?language=E&CatalogueIdList=83762,62699,98092,47679,36521,21815,296 60,1109&CurrentCatalogueIdIndex=4&FullTextHash=&HasEng-lishRecord=True&HasFrenchRecord=True&HasSpanishRecord=True ("Canada vibles of the little state of the little sta

overflight routes to extract fees or other concessions from European, Asian, and American air carriers and their home country governments.

During the Cold War, the Soviet Union strictly limited access to its airspace by Western carriers. It was commonplace in the 1970s and 80s to see routes such as London to Tokyo pass near the north pole in order to circumvent Soviet airspace. Since many such routings around Soviet airspace exceeded the range of the longest-haul commercial aircraft available at the time, fuel stops in Anchorage, Alaska became routine on passenger flights connecting East Asia with Europe or the Americas. To the extent that the Soviet Union permitted foreign carriers to fly trans-Siberian routes connecting Europe and the Far East, it did so on a bilateral, airline-by-airline basis.<sup>17</sup> In order to formalize a bilateral air services agreement enabling access to Russia's coveted overflight routes, a foreign state's air carriers had to enter into a "commercial agreement" through which they would pay "royalties," usually straight to the coffers of Russian flag carrier Aeroflot.<sup>18</sup> This pay-toplay system immediately became an irritant in Russia's trade relations with Europe, for whose long-haul carriers the trans-Siberian routes over Russia held exceptionally high value.

The end of the Cold War marked a new beginning for foreign carriers' efforts to capitalize on efficient routes between major northern hemisphere cities. Engaging with the new Russian government, the European Union argued that Russia's "commercial agreement" requirement violated Article 15 of the Chicago Convention, which limits overflight fees to cost-based support of air navigation resources. <sup>19</sup> Russia countered that European carriers had freely contracted to pay the royalties in return for overflights and that the payments compensated Aeroflot for business it supposedly ceded to European carriers on trans-Siberian routes. <sup>20</sup> When Russia sought to join the World Trade Organization (WTO) in the early 2000s, the European Union explicitly linked the overflight fees issue to its negotiations with Russia over WTO accession. <sup>21</sup> Those negotiations led to agreements in 2004 and

<sup>17.</sup> World Trade Organization Council for Trade in Services, Second Review Mandated Under Paragraph 5 of the Air Transport Annex, Addendum 2, Other Significant Economic and Regulatory Developments [hereinafter "WTO Second Review Addendum 2"], ¶ 755, WTO Doc. S/C/W/270/Add.2, https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=Q:/S/C/W270A2-04.pdf&Open=True.

<sup>18.</sup> Id.

<sup>19.</sup> *Id*.

<sup>20.</sup> Johannes Baur, EU-Russia Aviation Relations and the Issue of Siberian Overflights, 35 AIR & SPACE L. 225, 231 (2010).

<sup>21.</sup> WTO Second Review Addendum 2, ¶ 760.

2006 through which Russia indicated willingness to remove the commercial agreement requirement from new services by European carriers on trans-Siberian routes and to abolish the "royalty" fees by the end of 2013.<sup>22</sup> These agreements helped pave the way for Russia's WTO accession in 2012, but Russia never followed through on its commitment to give up royalties in favor of ICAO-compliant, cost-based overflight fees.

The end of the Cold War coincided with developments in longhaul airliner technology that gave North American air carriers new equities in Russian airspace, as well. While U.S. and Canadian carriers did not have the same degree of interest in east-west, trans-Siberian routes as European and Asian carriers, the advent of ultra-long-haul airliners that could fly non-stop between American and Asian points across the arctic made north-south, trans-polar routes through Russia newly essential.<sup>23</sup> During the 1990s, Russia cooperated with the United States, Canada, and Iceland to develop the navigation, communications, and airport infrastructure to support trans-polar routes that rendered fuel stops in Alaska unnecessary.<sup>24</sup> The new routes were a boon to international carriers—and another political and economic opportunity for Russia. Having assisted Russia with the development of trans-polar traffic management infrastructure, the United States negotiated an Air Transport Agreement with Russia in 1994 that did not require payment of royalties to Aeroflot but did place route and frequency restrictions on U.S. carriers' flights.<sup>25</sup> As East-, Southeast-, and South Asian markets increased in importance for American carriers over ensuing years, the Russian government consistently engaged in hard-nosed negotiations regarding the routes and frequencies that U.S. carriers could fly across Russia.

As 2022 dawned, Russia continued to aggressively leverage its overflight permissions, and European and Asian carriers continued to pay overflight fees that detracted significantly from the cost savings of overflying Russia en route between Europe and East Asia.<sup>26</sup> Russia also

23. Polar Routes – Past, Present and Future, NAV CANADA (Apr. 27, 2017), https://www.navcanada.ca/en/news/blog/polar-routes—past-present-and-future.aspx (last visited Oct. 20, 2023).

25. Air Transport Agreement Between the Government of the United States of America and the Government of the Russian Federation, signed at Moscow, Jan. 14, 1994, U.S. DEP'T OF STATE, https://www.state.gov/russian-federation-94-114-air-transport-agreement (last visited Dec. 21, 2023).

<sup>22</sup> Id

<sup>24.</sup> Id.

<sup>26.</sup> Lewis Harper, Air France-KLM Cites Relief from 'Astronomical' Russian Fees as it Ramps Up China Capacity, FLIGHTGLOBAL (Feb. 17, 2023),

leveraged overflight rights to obtain non-financial benefits, notably including access to prized landing slots at London's Heathrow Airport<sup>27</sup> and Amsterdam's Schiphol Airport.<sup>28</sup> Russia had raised the specter of overflight bans at various times in response to political pressure from the West, including amid Western sanctions imposed following Russia's occupation of the Crimea region of Ukraine in 2014,<sup>29</sup> but never followed through on such threats.

Following the February 2022 invasion of Ukraine, Russia did not immediately use its oft-threatened option to selectively deny access to its overflight routes. Instead, Russia responded to Western countries' actions to bar Russian aircraft from their airports and/or airspace, issuing NOTAMs on a tit-for-tat basis. The United Kingdom led with a NOTAM that went into effect on February 25, 2022.<sup>30</sup> Russia responded in kind within 24 hours, barring UK air carriers from operating to Russian airports or overflying Russian territory.<sup>31</sup> This pattern replicated over the following days with the rest of the E.U., Canada, and several British Overseas Territories. The United States followed suit with a ban announcement on March 1, 2022,<sup>32</sup> and Russia eventually reciprocated, although all major U.S. carriers had stopped flying routes over Russia before the Russian government formally banned them. Though not subject to a Russian ban, carriers from Japan and South Korea ceased flying to or over Russia "due to the situation in

https://www.flightglobal.com/networks/air-france-klm-cites-relief-from-astronomi-cal-russian-fees-as-it-ramps-up-china-capacity/152122.article?adredir=1.

<sup>27.</sup> See Gavin Rutter, How Has Access to Heathrow Airport Influenced the UK-Russia Air Services Agreement?, 45 AIR & SPACE L. 411 (2020) ("[I]t appears that Russia has increased the number of Siberian overflight frequencies in line with Aeroflot's increased access to Heathrow i.e. only once Aeroflot has obtained both the traffic rights and slots to maximize its Heathrow-Moscow service.").

<sup>28.</sup> Toby Sterling, *Dutch Authorities Try to Avoid Russian Air Ban over Schiphol Landing Slots*, REUTERS (Oct. 31, 2017, 12:48 PM), https://www.reuters.com/article/us-netherlands-russia-airport/dutch-authorities-try-to-avoid-russian-air-ban-over-schiphollanding-slots-idUSKBN1D02DB.

<sup>29.</sup> Tim Worstall, Russia Ups the Sanctions Ante by Threatening to Withdraw Overflight Rights, FORBES (Aug. 8, 2014, 4:31 AM), https://www.forbes.com/sites/timworstall/2014/08/08/russia-ups-the-sanctions-ante-by-threatening-to-withdraw-overflight-rights/?sh=3dfaa4db2504.

<sup>30.</sup> United Kingdom Bans Russia-Registered, Operated Aircraft, CH-AVIATION (Feb. 24, 2022 6:38 PM), https://www.ch-aviation.com/portal/news/112975-united-kingdom-bans-russia-registered-operated-aircraft.

<sup>31.</sup> Russia Bans British Airlines from its Airspace, BBC (Feb. 25, 2022), https://www.bbc.com/news/business-60505417.

<sup>32.</sup> David Shepardson, Jamie Freed & Foo Yun Chee, U.S. Follows Canada, Europe on Russian Aircraft Ban, REUTERS (Mar. 1, 2022, 9:39 PM), https://www.reuters.com/business/airspace-closures-after-ukraine-invasion-stretch-global-supply-chains-2022-03-01.

Russia and Ukraine."<sup>33</sup> When the dust settled, Russian commercial carriers and private aircraft were denied access to destinations in Europe and North America, and European, American, and some Asian carriers faced the challenge of maintaining (and, amid post-COVID economic recovery, growing) commercially viable long-haul services without crossing Russia.

The airspace bans immediately gave rise to concerns that air travel and supply chains between Asia, Europe, and the Americas would be severely disrupted. As affected carriers turned to indirect routes reminiscent of the Cold War, often overflying Alaska on flights between Asia and Europe, some services did become untenable, and many others became longer and costlier.34 However, data collected by OAG indicated that, while the geography of airspace closures particularly disadvantaged some routes—such as those connecting Finland and East Asia—the overall impact on flight lengths and air carrier capacity on affected routes was less severe than initially feared.<sup>35</sup> The CEO of Air France-KLM later claimed to reporters that despite prolonged flight times, the carriers' relief from paying "astronomical" fees to overfly Russia "more than offset[] the increased costs we were incurring on longer flights."36 Other carriers were differently situated and could not be so sanguine. United Airlines CEO Scott Kirby told reporters in June 2023 that the need to avoid Russian airspace rendered four of United's five previously-operated daily flights to India unviable.<sup>37</sup>

Kirby's comments highlighted the many routes on which carriers unaffected by Russian overflight bans compete head-to-head with

<sup>33.</sup> Notice Regarding Our Operations on European, Russian Routes, JAPAN AIRLINES (Aug. 22, 2023), https://www.jal.co.jp/jp/en/info/2022/other/220303/#:~:text=Notice%20regarding%20our%20operations%20on%20European%2C%20Russian%20routes%20(Last%20Updated,have%20been%20cancelled%20or%20rerouted. See also Notice Regarding the Operation of ANA Flights from/to Europe Related to

routed. See also Notice Regarding the Operation of ANA Flights from/to Europe Related to Russia and Ukraine, ANA (June 24, 2022), https://www.ana.co.jp/en/us/special-notice/000382.html?p1=top&p2=en&p3=global ("In light of the current situation in Russia and Ukraine, some ANA flights from/to Europe have been canceled.").

<sup>34.</sup> Justin Bachman, Danny Lee & Kati Pohjanpalo, Siberian Detour' Forces Airlines to Retrace Cold War Era Routes, BLOOMBERG (Mar. 12, 2022, 7:30 AM), https://www.bloomberg.com/news/articles/2022-03-12/siberian-detour-forces-airlines-to-retrace-cold-war-era-routes?leadSource=uverify%20wall#xj4y7vzkg.

<sup>35.</sup> Becca Rowland, *Impact of Russian Airspace Sanctions on Flight Routes and Flight Times*, OAG (Apr. 28, 2022), https://www.oag.com/blog/impact-russian-sanctions-flight-times.

<sup>36.</sup> Harper, supra note 26.

<sup>37.</sup> Madhu Unnikrishnan, *United's Scott Kirby Urges Ban on U.S. Flights Transiting Russian Airspace*, AIR CURRENT (June 5, 2023), https://theaircurrent.com/feed/dispatches/uniteds-scott-kirby-pushes-for-ban-on-u-s-flights-using-russian-airspace.

carriers that must now avoid Russia. This is true on all Chinese air carrier routes to Europe,<sup>38</sup> some Middle Eastern carriers' routes to North America, and, perhaps most uncomfortably, due to the burgeoning U.S.-India partnership, Air India's routes to the United States and Canada.<sup>39</sup> The length, geography, and profitability of U.S.-India routes has made Air India's Russian overflight advantage a particular focus of industry lobbying in Washington.<sup>40</sup> Nonetheless, Air India continues to overfly Russia en route to five U.S. cities, 41 while U.S. carriers' remaining nonstop routes to India around Russia are so long that flights sometimes have to make fuel stops to complete the trip.<sup>42</sup> Air India announced unprecedented frequencies on U.S. routes for the 2023-24 winter season,<sup>43</sup> and with orders placed in 2023 for dozens of new Boeing and Airbus long-haul aircraft,44 the carrier appears poised to further capitalize on its advantage on routes connecting India with North America and Europe. Air India CEO Campbell Wilson brushed off criticism of the airline's Russian overflights, arguing that "[o]verflight is only one dimension of a very, very complex industry," and that other issues such as government support and subsidies also contribute to a competitive environment that is "not a level playing field."45

Whether foreign air carriers' use of Russian airspace may return to its pre-2022 status, remain in its current Cold-War-like posture, or evolve into something new will largely depend on political outcomes in Russia and Western governments' tolerances for negotiation with Russia. Industry groups have already urged the E.U. to identify the conditions under which Russian air carriers may be permitted to

43. James Pearson, Air India Boosts Flights on 3 Delhi-US Routes This Winter, SIMPLE FLYING (Oct. 24, 2023), https://simpleflying.com/air-india-boosts-delhi-us-flight-routes.

<sup>38.</sup> Xiaofei Xu, Russia's War on Ukraine Redrew the Map of the Sky – but Not for Chinese Airlines, CNN (Apr. 25, 2023, 10:03 AM), https://www.cnn.com/travel/article/chinaeurope-airlines-russia-ukraine-airspace/index.html.

<sup>39.</sup> Sam Jakobi, Which Major Airlines Are Still Flying over Russian Airspace?, FLIGHTRADAR24 (Aug. 30, 2023), https://www.flightradar24.com/blog/which-major-airlines-are-still-flying-over-russian-airspace.

<sup>40.</sup> Kate Kelly & Mark Walker, Banned from Russian Airspace, U.S. Airlines Look to Restrict Competitors, N.Y. TIMES (Mar. 18, 2023), https://www.nytimes.com/2023/03/17/us/politics/russia-us-airlines-ukraine.html.

<sup>41.</sup> Nonstop International Flights, AIR INDIA, https://www.airindia.com/in/en/destinations/non-stop-international-flights.html (last visited Oct. 21, 2023).

<sup>42.</sup> Kelly & Walker, supra note 40.

<sup>44.</sup> Karen Walker, *All Eyes on India Market as Flag Carrier Confirms Large Aircraft Orders*, AVIATION WEEK NETWORK (June 20, 2023), https://aviationweek.com/airtransport/location/all-eyes-india-market-flag-carrier-confirms-large-aircraft-orders.

<sup>45.</sup> David Casey, Air India CEO Defends Use of Russian Airspace, AVIATION WEEK NETWORK (June 6, 2023),

resume European routes, hopefully paving the way for European carriers to resume flights over Russia. 46 But some Western politicians have suggested that carriers should not accept a return to the *status quo ante*, with large royalty payments to Aeroflot and other unusual concessions in return for the privilege of flying routes across Russia. However, a version of the *status quo ante* is likely to be exactly what Russia eventually offers, given the revenue and leverage opportunities involved. Russia reportedly has already increased the overflight fees levied on carriers that continue to operate over the country 47 in an effort to compensate for a dramatic decline in the number of overflights since early 2022. 48

## APPROPRIATION OF LEASED AIRLINERS VIOLATES INTERNATIONAL LAW AND SAFETY NORMS

Political challenges aside, to eventually lift the restrictions that obstruct air service between Russia, Europe, and North America will require overcoming daunting legal and technical challenges arising from Russia's appropriation and reregistration—in a sense, theft—of hundreds of Western-made and mostly-Western-owned airliners in 2022. During the Cold War, Aeroflot operated a varied fleet of airliners produced by Soviet manufacturers. After the fall of the Soviet Union, however, Aeroflot and a growing cast of private Russian airlines turned almost exclusively to Boeing and Europe's Airbus for passenger aircraft. Like many air carriers throughout the world, the Russian carriers did not purchase many of their aircraft outright, but leased them from aircraft leasing companies. In the case of the Russian airline fleets, many of the lessors were based in Ireland,<sup>49</sup> and many of the leased aircraft were registered in Bermuda, making the Bermuda Civil Aviation Authority responsible for the leased jets' airworthiness. In February 2022, there were over 500 leased airliners in Russia, valued at approximately \$10 billion.50

When Western sanctions caused aircraft leasing companies to sever their ties with Russian customers, the companies attempted to

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<sup>46.</sup> Christopher Jasper, Airlines Urge EU to Set Terms for Return of Russia Flights, BLOOMBERG (Dec. 6, 2022, 12:36 PM), https://www.bloomberg.com/news/articles/2022-12-06/airlines-urge-eu-to-set-terms-for-return-of-russia-flights.

<sup>47.</sup> Henry Wood, Russia Hikes Overflight Charges by 20% in Bid to Raise Cash, SIMPLE FLYING (June 25, 2023), https://simpleflying.com/russia-overflight-charge-hike.

<sup>48.</sup> Transit flights over Russia Drop 59% in 2022 – Rosaviatsia, INTERFAX (Mar. 14, 2023, 12:31 PM), https://interfax.com/newsroom/top-stories/88696.

<sup>49.</sup> Mari Eccles, Russia: We've Got Hundreds of your Planes. What You Going to Do About It?, POLITICO (Mar. 16, 2022, 5:09 PM), https://www.politico.eu/article/russia-steal-billion-lease-aircraft-eu.

<sup>50.</sup> Id.

recall their aircraft. Russian President Putin responded by approving a law that gave the leased airliners Russian registration—effectively giving the aircraft dual registration, in violation of Article 18 of the Chicago Convention.<sup>51</sup> In a June 2022 statement calling on Russia to "immediately cease its infractions of the Chicago Convention," the ICAO Council noted the safety-related obligations of an aircraft's state of registration and stressed that "dual registration of aircraft raises safety concerns relating to, among others, the international validity of each airplane's certificate of airworthiness and radio station license."52 Stymied in their attempts to repossess aircraft from Russia, aircraft leasing companies engaged with the governments of third countries where some Russian carrier aircraft were physically located in attempts to recover the aircraft. But Russia brought its own political leverage to bear to prevent repossession of aircraft, and the leasing companies' recovery efforts had limited success,<sup>53</sup> leaving the issue to be negotiated between the leasing companies and their insurers.

Many—probably most—of the leased airliners remaining in Russian hands continue to fly, although Boeing and Airbus have both cut ties with Russian customers, and an imposing array of sanctions enacted by the United States and a coalition of partners aims to block shipments of aircraft parts to Russia. Some airliners in Russia have reportedly been "cannibalized" for parts to keep other aircraft operational—a practice blessed by Russia's Federal Air Transport Agency but contrary to global aviation safety norms.<sup>54</sup> Russian carriers are not completely reliant on cannibalization, however, because Western aircraft parts still make their way to Russia despite sanctions, often via cooperative entities in the Middle East, China, and elsewhere in Asia.<sup>55</sup> For now, Russian airlines maintain an extensive domestic network as

<sup>51.</sup> Convention on Int'l Civ. Aviation, supra note 13, art. 18.

<sup>52.</sup> ICAO Council Reviews Dual Registration of Commercial Aircraft by Russian Federation, ICAO (June 28, 2022), https://www.icao.int/Newsroom/Pages/ICAO-Council-reviews-dual-registration-of-commercial-aircraft-by-Russian-Federation.aspx.

<sup>53.</sup> Anastasia Dagaeva, Turbulent Times: How Russian Airlines are Weathering the Storm, CARNEGIE POLITIKA (Mar. 28, 2023), https://carnegieendowment.org/politika/89389; Jeanne Whalen, Ellen Nakashima & Hafeel Farisz, Russia Holding 400 Passenger Jets Hostage in Global Sanctions Fight, WASH. POST (July 12, 2022, 10:18 PM), https://www.washingtonpost.com/business/2022/07/12/russia-aircraft-seizure-srilanka.

<sup>54.</sup> Russian Regulator Approves Aircraft Cannibalization amid Sanctions, AVIATION WEEK NETWORK (Jan. 20, 2023), https://aviationweek.com/air-transport/maintenance-training/russian-regulator-approves-aircraft-cannibalization-amid.

<sup>55.</sup> Ana Swanson & Niraj Chokshi, U.S.-Made Technology Is Flowing to Russian Airlines, Despite Sanctions, N.Y. TIMES (May 15, 2023), https://www.nytimes.com/2023/05/15/business/economy/russia-airlines-sanctions-ukraine.html.

well as international flights to destinations in Central, South, and Southeast Asia, China, the Middle East, Cuba, and Venezuela. Russian carriers have avoided disaster since post-Ukraine-invasion sanctions went into effect, though some reports have already indicated a rise in safety-related incidents involving Russian air carriers. Near-misses—such as when a Ural Airlines Airbus aircraft with 170 aboard landed in a field in September 2023<sup>57</sup>—inevitably prompt questions about the state of aircraft maintenance. In perhaps a sign of sensitivity on the subject, Russian Embassies abroad amplified news of the "miracle" Ural Airlines landing to local audiences. Se

ICAO responded to Russia's actions first by issuing a "Significant Safety Concern" on June 15, 2022, noting that "aircraft continued to be operated without a valid certificate of airworthiness (Article 31 of the Convention) or a valid radio station license (Article 30 of the Convention), as well as without assurance of the associated oversight responsibilities." Then, at ICAO's triennial Council election in October 2022, member states expressed their displeasure by voting Russia out of the Council, where it had been among 11 "states of chief importance in air transport"—the highest status among the Council's 36 members. It was the first time a "state of chief importance" had lost its seat. It Prior to the vote, U.S., Canadian, and E.U. representatives urged members not to vote for Russia, highlighting Russia's violation of

<sup>56.</sup> Jim Wilson, Russian Aircraft Incidents Triple in 2023 Amidst Spare Parts Shortages and Sanctions, AIRGUIDE (Dec. 12, 2023), https://www.airguide.info/russian-aircraft-incidents-triple-in-2023-amidst-spare-parts-shortages-and-sanctions.

<sup>57.</sup> Russian Airliner Forced to Land in Open Field, BBC (Sept. 12, 2023), https://www.bbc.com/news/world-europe-66785897.

<sup>58.</sup> See, e.g., Embassy of Russia in Brunei (@rusembbrunei), INSTAGRAM, https://www.instagram.com/p/CxF7Uw7hT5W/?img\_index=1 ("Thanks God, no casualties. A miracle safe landing!") (last visited Oct. 21, 2023).

<sup>59.</sup> Int'l Civ. Aviation Org. Assembly, 41st Session Executive Committee Working Paper, Infractions of the Convention on Civil Aviation by the Russian Federation, ¶ 2.6, ICAO Doc. A41-WP/430, https://www.icao.int/Meetings/a41/Documents/WP/wp\_430\_en.pdf. The Significant Safety Concern had the second-order effect of causing the UN to ground its Russian-made contracted aircraft, which comprised over 20 percent of the UN fleet that supports peacekeeping and distribution of aid. Dawn Clancy, Russia's Violations of Global Aviation Rules Could Leave the UN with Tough, Costly Choices, PASSBLUE (Aug. 16, 2022), https://www.passblue.com/2022/08/16/russias-violations-of-global-aviation-rules-could-leave-the-un-with-tough-costly-choices.

<sup>60.</sup> Allison Lampert, Russia Loses U.N. Aviation Council Seat in Rebuke, REUTERS (Oct. 1, 2022, 12:49 PM), https://www.reuters.com/world/europe/russia-not-re-elected-un-aviation-agencys-36-member-council-2022-10-01.

<sup>61.</sup> Luke Bodell, *Voted Out: Russia Loses ICAO Council Seat*, SIMPLE FLYING (Oct. 2, 2022), https://simpleflying.com/russia-loses-icao-council-seat.

Ukrainian airspace and dual registration of foreign-owned aircraft as violations of the Chicago Convention. 62 Russia needed 86 votes out of 193 ICAO member states to maintain its place on the Council; it received 80 votes, while other "states of chief importance" all received 140 or more votes and kept their seats. In a statement after the vote, Russia's representative said, "We view this as a purely political step and has nothing to do with Russia's position in the field of civil aviation."

### WILL RUSSIA REALLY GO ITS OWN WAY ON CIVIL AVIATION?

Russia's fall from the top echelon of the ICAO Council was emblematic of its fall—at least temporarily—from the world's aviation elite to the ranks of pariah states where the aviation industry scrapes by on government support, black market parts, cannibalization of aircraft, and improvisation. While at first it seems surprising that Russian air carriers could maintain vigorous flight operations after many predictions of their (and the Russian economy's) demise under the crush of sanctions, it is worth noting that countries like Iran and Venezuela have managed to keep their air carriers flying—and in some cases growing—despite years of sanctions and relative isolation. But in aviation as in other ways, Russia has an altogether different scale and stature, making it hard to imagine a long period of civil aviation pariah status.

An end to the war in Ukraine may not be a prerequisite for Russia's reinstatement to some degree of legitimate status in international aviation. Despite the profound ruptures caused by Russia's invasion of Ukraine, its refusal to return aircraft to lessors, and its dual registration of airliners, the Russian government has already taken steps toward mitigating the latter two issues. Russian carriers have reportedly purchased some of the aircraft that they withheld from Western lessors, 64 aided by an infusion of roughly \$4 billion in Russian government funds. 65 Once aircraft are bought back from lessors, Russia has reportedly arranged for their deregistration by their original, foreign state of registry, leaving them with sole Russian registry and avoiding prohibitions on dual-registered aircraft. 66 The eventual resolution of these

<sup>62.</sup> Lampert, supra note 60.

<sup>63.</sup> Id

<sup>64.</sup> Russia's Air Transport Industry Deals with Ukraine War Fallout, AVIATION WEEK NETWORK (Feb. 1, 2023), https://aviationweek.com/air-transport/airlines-lessors/russias-air-transport-industry-deals-ukraine-war-fallout.

<sup>65.</sup> Russia Allocates \$4B to Buy Western Jets from Some Lessors, AVIATION WEEK NETWORK (Mar. 21, 2023), https://aviationweek.com/air-transport/airlines-lessors/russia-allocates-4b-buy-western-jets-some-lessors.

<sup>66.</sup> Dagaeva, supra note 53.

aviation-specific issues could bolster arguments by air carriers seeking ways to resume Russian overflights at the soonest opportunity.

However, Russia has signaled readiness to weather a long period of isolation in the aviation sector, if necessary. The Russian government issued an aviation industry plan for 2030 premised on the industry's continued isolation.<sup>67</sup> The plan envisions reinvigoration of Russian airliner manufacturing to supplant Western-made aircraft as they are retired.<sup>68</sup> A Russian industry official declared homegrown aircraft projects by Russian companies to be the "basis for the Russian airline fleet in future."<sup>69</sup> For its part, Russian flag carrier Aeroflot in September 2022 announced an order of 339 Russian-made aircraft for delivery between 2023 and 2030.<sup>70</sup> An Aeroflot press release stated, "Historical changes are coming to civil aviation. Boeing and Airbus aircraft, which are unlikely to ever be delivered to Russia again, will be replaced by Russian-made passenger aircraft."<sup>71</sup>

Since the end of the Cold War, however, Russian aircraft makers have become dependent on numerous Western-made components, and their ability to produce or obtain substitutes in the near term remains uncertain. Aircraft maker United Aircraft Corporation (UAC) has embarked on a project to create an all-Russian version of the only Russian-made passenger airliner currently operating in significant numbers, the Sukhoi Superjet, or SSJ.<sup>72</sup> The new SSJ version, dubbed the SSJ-NEW or SJ-100, flew for the first time in August 2023. However, even this theoretically all-Russian model was powered by the same partly-French-made engines as the old variant, <sup>73</sup> since new, all-Russian-

<sup>67.</sup> Id.

<sup>68.</sup> Russia's Air Transport Industry Deals with Ukraine War Fallout, supra note 64.

<sup>69.</sup> Preparation for the First Flight of the SSJ-NEW Is on the Home Stretch Now, ROSTEC (June 6, 2023), https://rostec.ru/en/news/preparation-for-the-first-flight-of-the-ssj-new-is-on-the-home-stretch-now.

<sup>70.</sup> Aeroflot and UAC Sign Agreement for Purchase of Russian-Made Aircraft, AEROFLOT (Sept. 7, 2022), https://www.aeroflot.ru/xx-en/news/62465.

<sup>71.</sup> Id.

<sup>72.</sup> Oliver Wyman, *Ukraine Sanctions May Stifle Russia's Commercial Aviation Growth for 10 Years*, FORBES (Apr. 13, 2023, 8:00 AM), https://www.forbes.com/sites/oliver-wyman/2023/04/13/ukraine-sanctions-may-stifle-russias-commercial-aviation-growth-for-10-years/?sh=3c16b0715f15. The Sukhoi Superjet, a twin-engine airliner capable of transporting up to 108 passengers, comprised just over 15 percent of the combined fleets of Russia's eight largest carriers, as of 2022. *Impact of the Russo-Ukrainian War on Aviation*, FROST & SULLIVAN (Apr. 1, 2022), https://www.frost.com/frost-perspectives/impact-of-the-russia-ukraine-crisis-on-aviation.

<sup>73.</sup> Scott Foster, Russia Defies Sanctions with Homemade Sukhoi Superjet, ASIA TIMES (Sept. 8, 2023), https://asiatimes.com/2023/09/russia-defies-sanctions-with-homemade-sukhoi-superjet.

made engines were delayed and not yet ready. <sup>74</sup> UAC is similarly working to reproduce two mid-sized airliner models with all Russian components to replace Airbus and Boeing models. <sup>75</sup> But Aeroflot's order of Russian aircraft lacked any widebody airliners of the sort used on most long-haul international routes and some transcontinental routes within Russia, for which Russian carriers currently use only Boeing and Airbus models. <sup>76</sup> UAC publicized the test-flight on November 1 of an updated version of a widebody airliner, touting the plane as "a demonstration of the highest level of competencies of domestic design bureaus and aircraft factories." <sup>77</sup> The aircraft, the IL-96, has seen limited commercial use since its initial design in the 1980s. It may eventually fill in for Western long-haul models, although no air carriers have yet reported orders of the jet.

If Russian efforts to construct an aviation industry impervious to Western sanctions were even partially successful, Russia would be well positioned to support partners who have for years pursued a similar goal-including North Korea, Iran, Cuba, and Venezuela-while providing an alternative source of aircraft, parts, and rules for other countries that may find themselves similarly situated. But such a future would neglect significant Russian interests (global connectivity, aerospace leadership, and revenue from overflight fees, for example) and Western interests (overflight access, avoidance of fragmented aviation safety rule systems). It seems likely that powerful constituencies in Russia and in the West will gradually push—with or without resolution in Ukraine—to resume at least some aspects of the pre-2022 status quo. Russia's possession of sovereign airspace astride the most efficient air routes between the world's most important passenger and cargo markets—currently subject to unequal access by Chinese, Indian, and Middle Eastern carriers—ensures that Western carriers will continue pressing for access and that future Russian aviation leaders will seek to leverage their geography as their forebears have done.

<sup>74.</sup> Certification of Russian-Made Engine for SSJ-NEW Delayed for September, AVIATION WEEK NETWORK (Apr. 21, 2023), https://aviationweek.com/air-transport/aircraft-propulsion/certification-russian-made-engine-ssj-new-delayed-september.

<sup>75.</sup> Foster, supra note 73.

<sup>76.</sup> Impact of the Russo-Ukrainian War on Aviation, supra note 72.

<sup>77.</sup> Russian Wide-Body Jet Makes First Test Flight, RT (Nov. 1, 2023, 12:34 PM), https://www.rt.com/business/586345-russian-aircraft-maiden-flight.