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Ukrainian airlines during the period of martial law

The aim of this study is to analyse the operational activities of Ukrainian International Airlines and SkyUp during the period of martial law. The main key performance indicators of Ukrainian airlines and airports were analysed. Also, the main problematic aspects of the organization of these airlines activities during the war have been identified in this research.

The COVID-19 pandemic has significantly influenced the aviation of all countries of the world - since February 2020, and especially in the spring, airlines have significantly reduced the number of flights or stopped flights altogether. The pandemic-induced crisis is the deepest for aviation since World War II, with governments deciding to impose quarantines, shut down flights and ban or restrict entry. In April 2020, the number of flights (compared to April 2019) fell by 80% in the world, and by 90% in Europe.

However, for the civil aviation of Ukraine, the real disaster began on 24 February 2022, then Ukraine closed the entire airspace for civil transportation due to the full-scale military invasion of russia.

Along with it, all air transportation to, from and within Ukraine was completely stopped, the activities of dozens of airports, airlines and other enterprises of the aviation market stopped.

According to the results of 2022, a total of 981,500 people was transported by domestic airlines, which was 89.5% less than the previous year. The volumes of cargo transportation and postal air transport of Ukraine decreased by 21.7% from 2021 and amounted to 64.1 thousand tons. Passenger flows through the airports of Ukraine decreased by 87.7%, mail flows by 83.4% and amounted to 1998.2 thousand people and 10.5 thousand tons, respectively. [1].

As can we see on Table 1, there was a significant decrease in the production indicators of aviation enterprises of Ukraine in 2022 compared to 2021.

To this statistical information on passenger flows and mail cargo flows through Ukrainian airports on the schedule for 2022 is given for the period from 01.01.2022 to 23.02.2022, starting from 24.02.2022 passenger and cargo transportation through Ukrainian airports was not implemented due to the introduction of martial law in Ukraine and the closure of Ukrainian airspace for civilian users.

Indicator	Measurement units	Altogether			International of them		
	units	2021	2022	%	2021	2022	%
		year	year		year	year	
Airlines							
Transported passengers	thousands of people	9348,1	981,5	10,4	8622,3	886,2	10,3
including on regular transportation	thousands of people	3322,7	423,3	12,7	2608,9	329,3	12,6
Transported cargo and mail	thousands of tons	81,9	64,1	78,3	81,9	64,1	78,3
including on regular transportation	thousands of tons	8,9	1,1	12,4	8,9	1,1	12,4
Commercial flights	thousands	74,1	13,1	17,7	60,0	11,2	18,7
including on regular transportation	thousands	34,4	4,7	13,7	21,9	2,9	13,2
Airports							
Passenger flows	thousands of people	16221,0	1998,2	12,3	14753,8	1796,5	12,2
including on regular transportation	thousands of people	10172,7	1606,1	15,8	8738,3	1410,6	16,1
Mail cargo flows	thousands of tons	63,2	10,5	16,6	62,5	10,4	16,6
including on regular transportation	thousands of tons	52,5	7,9	15,0	51,9	7,8	15,0

Table 1. Key performance indicators of aviation companies in Ukraine

Ukrainian aviation industry developed rapidly before the war. Over the past ten years, the largest European low-cost airlines have come here, in 2021 Ukraine and the EU signed an agreement on Open Skies, and Ryanair CEO Michael O'Leary six months before the war called Ukraine one of the most promising markets and promised to become the largest investor in the local aviation industry. Ukraine accounted for 3.3% of the total volume of air passenger transportation in Europe and 0.8% of the volume of transportation in the world before the war.

However today, Ukraine is closed the sky for commercial airlines, most airlines have lost their aircrafts, thousands of people from aviation industry have lost their jobs, the aviation industry is suffering billions of dollars in damage to infrastructure and business every day under the conditions of martial law.

After the closure of the airspace, only military airfields and airports of shared use, which operate in the interests of the security and defence sector, remained in operation [2].

According to the State Aviation Service, 16 Ukrainian airlines operated in the country before the war. At the same time, only four accounted for 93% of transportation – Ukrainian International Airlines (UIA), SkyUp, Azur Air Ukraine and "Windrose".

Even before the russian invasion, against the background of general panic, insurance companies began to refuse to insure risks for planes of Ukrainian airlines. Most of these planes are not owned by companies, they are leased. Therefore, without insurance and because of the risks, lessors began to recall the planes in masse. SkyUp, UIA and Azur Air Ukraine lost part of their fleet, and the Ukrainian low-cost Bees Airline, which began operations in the spring of 2021, lost all its planes.

Some of the planes were simply "stuck" in Ukrainian airports after the start of the war, because they did not have time to fly out of the country before the sky was closed for flights. In particular, the entire fleet of "Windrose" and part of the fleet of UIA and Azur Air Ukraine are idle.

Today, Ukraine is in the same group with countries classified as the highest risk in terms of flight safety.

On the map of safe airspace, you can see 7 countries that have the highest 1 level of risk – moderate, including Ukraine.

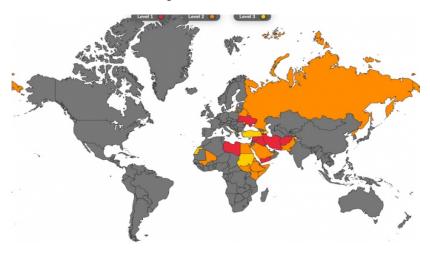


Fig. 1. Map of safe airspace [3]

Civil aircraft operators are advised to avoid such areas entirely.

In the conditions of the constant threat of rocket attacks and terrorist attacks on civil infrastructure, airports cannot function as usual, and we must understand that the risks for flights will not disappear for a long time.

The European aviation market experienced a boom in 2022, as the EU lifted the Covid-19 restrictions. As a result, by the end of 2022, the EU market has almost reached the indicators of the record year of 2019. The market expects even greater traffic growth in 2023.

Only two companies - UIA and SkyUp - were able to continue the work one way or another afte the russian invasion. The rest were forced to "land". The main source of work and income for those Ukrainian companies that were able to evacuate their planes is charter transportation for tour operators, humanitarian flights and socalled "wet" leasing, when the company leases the plane along with the crew and maintenance.

The demand for such services in Europe has grown significantly. After two years of downtime during the COVID-19 pandemic, when companies cut staff and limited flights, travel has become relevant again in the summer of 2022.

UIA was the main airline of the country - it had the most planes, the most flights and the most diverse flight directions before the war.

In connection with the beginning of the full-scale military invasion of russia on the territory of Ukraine and the closure of the airspace of Ukraine for civil aviation, UIA has suspended the performance of regular and charter flights to/from the territory of Ukraine. The war hit the carrier. Out of more than two dozen boards, UIA actually has four left. Lessors recalled some of the planes on the war eve, fearing a hypothetical escalation at that time. Some were "stuck" in Ukrainian airports, they did not have time to take off when the sky was closed over Ukraine due to the war.

At first, UIA was among the lucky ones who managed to continue their activities. In the first six months of the war, UIA focused on charter flights for European customers, and provided flights for sports teams of European countries and Ukraine. In particular, the company performed charters for the Polish tour operator ITAKA. [4] However, this activity did not have commercial success. According to Ukrainian Forbes, in the first half of 2022, UIA's turnover decreased by three times - to 1.2 billion hryvnias. If in January - June 2021 the company received 22 million hryvnias in profit, then this year - 1.3 billion hryvnias in loss. As of 1 September, the airline had 1,135 employees - almost 300 less than in 2021.

In the autumn of 2022, everything became even worse - in fact, even the existing planes stopped flying. In addition, the internal conflict between UIA shareholders was added to the problems with the war, which also intensified the in autumn. Therefore, the work of UIA in 2023 is practically blocked.

Unlike UIA, the SkyUp airline met the war more prepared. The company not only managed to take almost its entire fleet out of Ukraine before the airspace was closed (only one plane got stuck in Boryspil). All this time, SkyUp actively continues to fly and earn money, only now - in Europe. [5]

During the six months of the war, it made more than 4,000 flights, transported more than 619,000 passengers in 227 directions. And even attracted a new Boeing 737-800 plane, thus becoming the owner of the largest available aircraft fleet among Ukrainian companies - 12 planes.

During 2022, the SkyUp airline managed to work with 10 airlines, including Wizz Air, SmartWings, Freebird Airlines, Tailwind Airlines, Corendon Airlines, etc., on the terms of a "wet" leasing; began to implement charter programs for Join UP! Baltics from Lithuania, Latvia and Estonia to Egypt, as well as charter flights for Join UP! Ukraine from Poland to Egypt; made special flights for Hasidic pilgrims from Tel Aviv - Chisinau - Tel Aviv, who came to Uman to celebrate Rosh Hashanah; added a new aircraft to its fleet in the summer and can now operate 11 aircraft. [6]

In total, 7,713 flights were performed in 2022. The airline carried more than 1.08 million passengers on these flights. The airline's planes flew to 204 airports around the world on 627 routes.

In 2023, SkyUp will continue to work on creating a company specifically for the European market with a European operator certificate, a separate staff and separate aircraft. This process will take at least a few more months, but after that SkyUp will be able to operate its own flights and sell tickets as a full-fledged carrier. However, the biggest dream is to return to the native Ukrainian sky.

In order to open Ukrainian sky for aviation, special security guarantees from the Ukrainian Armed Forces and at least several months for the restoration of airports and flights will be needed.

However, now it is quite difficult to predict how the Ukrainian aviation industry will turn out from this war. Most likely, many things will have to be built from scratch, since almost all airports and airfields of Ukraine have suffered one or another blow.

Air flights will be resumed gradually and along defined safe routes. Most airlines are ready to return to Ukraine as soon as possible.

We believe that 2023 will be the year of Victory and the year when civil planes will once again fly into the peaceful Ukrainian sky, and Ukrainian airports will gladly open their terminals for passengers from all over the world.

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