

## THE ROLE OF MILITARY AVIATION IN THE OCCUPATION OF CRIMEA (2014)

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**Abstract.** *The occupation of Crimea has become one of the most severe military-political crises of the last decade. The Russian Federation carried out this operation as hybrid war. Along with the widespread use of methods and tools of information warfare, Russia used the units of the Black Sea Fleet stationed in Crimea and the forces additionally transferred to the peninsula. One of the main ways of moving those forces was by aerial military transport. In addition, helicopters were deployed to block the Ukrainian garrisons in Crimea.*

*During the Crimean crisis, Ukrainian military aviation, much like other components of the Ukrainian Armed Forces, remained utterly passive. The only manifestation of active resistance was the relocation of several aircraft and helicopters from the Saki-Novofedorivka airfield to the mainland of Ukraine (the equipment was removed until early June 2014). Instead, the Russian Federation's Armed Forces promptly stationed a powerful aviation group (three Air Force regiments and two Navy aircraft) in occupied Crimea.*

**Keywords:** *Air Forces, Crimea, hybrid war, military aviation, Russia, Ukraine.*

**Rezumat: Rolul aviației militare în ocuparea Crimeii (2014).** *Ocuparea Crimeii a devenit una dintre cele mai severe crize militare-politice din ultimul deceniu. Federația Rusă a efectuat această operațiune ca un război hibrid. Împreună cu utilizarea pe scară largă a metodelor și a instrumentelor de război de informații, Rusia a folosit unitățile Flotei Mării Negre staționate în Crimeea, precum și forțele transferate suplimentar în peninsula. Una dintre principalele modalități de deplasare a acestor forțe a fost transportul militar aerian. Totodată, au fost utilizate elicoptere pentru a bloca garnizoanele ucrainene din Crimeea.*

*În timpul crizei din Crimeea, aviația militară ucraineană, la fel ca și alte componente ale forțelor armate ucrainene, a rămas complet pasivă. Singura manifestare a rezistenței active a fost relocarea mai multor aeronave și elicoptere din aeroportul Saki-Novofedorivka în interiorul Ucrainei (echipamentele au fost strămutate până la începutul lunii iunie 2014). În schimb, forțele armate ale Federației Ruse au amplasat cu promptitudine un puternic grup de aviație (trei regimente ale Forțelor Aeriene și două aeronave marine) în Crimeea ocupată.*

## INTRODUCTION

The armed conflict in eastern Ukraine, also known as the Russian-Ukrainian war, has significantly affected European and world political processes since 2014. At the same time, it attracted researchers' interest as the first full-scale armed conflict in Europe since the wars in the former Yugoslavia. Although the intensity of hostilities has significantly decreased recently (compared to 2014-2015), military actions along the front line in eastern Ukraine continue, and the prospects for a peaceful resolution remain uncertain. The issue of Russia's annexation of Crimea and occupation of a part of the Donetsk and Luhansk regions remains unresolved.

The Russian Federation's annexation of Crimea (more precisely, the Autonomous Republic of Crimea and the city of Sevastopol, separate administrative entities under Ukrainian law) in February 2014 sparked the Russian-Ukrainian war. Despite Russian claims that the annexation was "peaceful" and based on the "will" of the local population, the operation was essentially military and resulted in the forceful occupation by Russian forces of a part of Ukraine's internationally recognised territory. Many studies, particularly those by Oleksandr Marusiak, use these facts considerably. The overall historical aspect of the occupation of Crimea has been adequately addressed in the studies of Pavlo Hai-Nyzhnyk, Yaroslav Mykolaenko, Gennadiy Zhyrov, Paul A. Eden, and others; thus, it will not be highlighted further. Taras Berezovets' study, which examines in detail the mechanisms and technologies of the hybrid war waged by Russian Federation troops on the territory of the Autonomous Republic of Crimea, deserves special attention.

The first article (aside from those released by news agencies) on the role of aviation in the occupation of Crimea was written by Oleksandr Kotlovskyi and Rostyslav Maraiev. It covers Russian troops' military actions (with a focus on aviation) during the peninsula's annexation, specifically the use of military transport aircraft to transfer forces to the Hvardiiske airfield and the use of helicopters to capture the Feodosiia Marine Battalion and other Ukrainian military units. The main focus is on the fate of the Ukrainian aircraft units stationed in Crimea.

Foreign publications describing the role of aviation during the Crimean Crisis initially focused on the chronology of events. For example, in 2014, this type of material was published in the periodicals *Air Forces Monthly* and *Combat Aircraft*

*Monthly*.<sup>1</sup> The authors tried to keep a close eye on the developments on the peninsula and keep Western readers informed. Among later publications, Vladimir Trendafilovskiy's study on the deployment of the Ukrainian 10<sup>th</sup> Marine Aviation Brigade from Crimea to the mainland of Ukraine deserves special mention.<sup>2</sup>

As for Russian sources, the most significant one is "Brothers Armed. Military aspects of the crisis in Ukraine" – the series published by the Centre of Analysis of Strategies and Technologies (CAST). Two articles of the series stand out. The first one is Dmitry Boltentkov's work covering the history of the Russian troops' deployment in Crimea.<sup>3</sup> The second one is Anton Lavrov's article, which exclusively focused on the aviation component of the Crimean occupation campaign.<sup>4</sup> The facts mentioned in the paper indicate the Russian Armed Forces' direct and active involvement in the military actions on the peninsula. The author lists the units of land forces, airborne troops, and marines that took part in the occupation of Crimea. However, the article does not contain precise information about the aviation component of the invading force – the author only mentions the presence of Russian transport aircraft for the transfer of troops and helicopters to Crimea to block the Ukrainian ships and garrisons.

This study aims to analyse the military component of the occupation of the peninsula, namely the presence of military aircraft, from both Russia and Ukraine. The term "Ukrainian military aviation" refers to the aviation of all security forces of Ukraine, including the Air Force, Army Air Force, Naval Aviation, aviation of the State Border Guard Service, and the State Emergency Service. On the Russian side, Air Force and Navy aircraft have been deployed to occupy Crimea.

Although a peninsula from a geographical point of view, Crimea is an island from the military-strategic perspective. It is connected to the mainland only by the

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<sup>1</sup> *Crisis in Crimea*, in "Air Forces Monthly", 2014, No. 4, p. 5; *Russian forces take over Ukraine air base in Crimea*, in "Air Forces Monthly", 2014, No. 5, p. 5; S. Büttner, P. Roegies, *Crisis in Crimea*, in "Combat Aircraft Monthly", 2014, No. 5, p. 66-71; I. Voukadinov, *Crisis on Crimean Peninsula*, in "Air Forces Monthly", 2014, No. 5, p. 85-87; B. Taghavaee, *Be'l'bek Ukraine's last Crimean fighter base*, in "Air Forces Monthly", 2014, No. 5, p. 91-94.

<sup>2</sup> V. Trendafilovski, *Crimea's Unsung Heroes*, in "Air Forces Monthly", 2015, No. 9, p. 76-81; V. Trendafilovski, *Ukraińscy lotnicy morscy – milczący bohaterowie z Krymu* [Ukrainian naval aviators – silent heroes from Crimea], in "Lotnictwo", 2015, No. 11, p. 70-80.

<sup>3</sup> D. Boltentkov, *Home of the Black Sea Fleet: History and Disposition of Russian Forces in Crimea*, in "Brothers Armed. Military aspects of the crisis in Ukraine", Minneapolis, East View Press, 2015, p. 136-158.

<sup>4</sup> A. Lavrov, *Russian Again: The Military Operation for Crimea*, in "Brothers Armed. Military aspects of the crisis in Ukraine", Minneapolis, East View Press, 2015, p. 158-179.

narrow Perekop Isthmus, which can be easily blocked. Therefore, the Navy played a decisive role in planning military operations in Crimea (for example – the Crimean war of 1853-1856), as well as aviation since the middle of the twentieth century (for example – the occupation of the peninsula by German and Romanian troops in 1941-1942 and the liberation of Crimea by the Red Army in 1944). Thus, in planning the operation to occupy Crimea, the Russian military leadership understood that it would be impossible to quickly increase the Russian military contingent on the peninsula and seize critical points in Crimea without the use of transport aviation. On the other hand, the Ukrainian military aviation stationed in Crimea would undoubtedly have fought, but that never happened.

### AVIATION UNITS IN CRIMEA ON THE EVE OF THE CRISIS

Two countries' aviation forces – Ukraine and the Russian Federation – were stationed on Crimea's territory at the start of 2014. The "Crimea" tactical group of the Air Command "South" served as the foundation for the Ukrainian Armed Forces' aviation group on the peninsula. It was previously part of the Air Force, but it has been operationally subordinated to the Ukrainian Navy since September 1, 2012, and was led by Major General Oleh Strutsynskyi. This group's primary mission was to provide air defence for strategic facilities in Crimea. Accordingly, five main units were formed:<sup>5</sup> the 204<sup>th</sup> Tactical Aviation Brigade at Belbek airport (near Sevastopol) armed with MiG-29 fighters; the 50<sup>th</sup> Anti-aircraft Missile Regiment in Feodosiya, which included two divisions of S-300PS long-range anti-aircraft missile systems; the 174<sup>th</sup> Anti-aircraft Missile Regiment in Sevastopol – three S-300PS divisions; the 55<sup>th</sup> Anti-aircraft Missile Regiment in Yevpatoriia – three divisions of "Buk-M1" medium-range anti-aircraft missile systems; the 40<sup>th</sup> Separate Radio Engineering Brigade, headquartered in Sevastopol, and approximately ten radar units were positioned along the Crimean coast.

The "Crimean" tactical group also included several smaller units and the State Aviation Research and Testing Centre.<sup>6</sup> This centre, located at the Kirovske airfield, was engaged in testing new and modernised aircraft and training test pilots.

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<sup>5</sup> *Vtraty ukrainskoi armii v Krymu* [Losses of the Ukrainian army in Crimea], in <http://pohlyad.com/news/n/43101> (Accessed 20.03.2021).

<sup>6</sup> *Derzhavnyi aviatsiynyi naukovo-vyprobuvalnyi tsentr* [State Aviation Research and Testing Center], in <https://mil.in.ua/uk/derzhavnyy-aviaciynny-naukovo-vyprob/> (Accessed 20.03.2021).

The 204th Tactical Aviation Brigade's – the main aviation unit – formally had 45 MiG-29 fighters and four L-39M1 training planes. However, most fighters were defective due to chronic underfunding, and L-39M1 planes were used to maintain pilot skills.<sup>7</sup> The number of combat-ready aircraft apparently did not exceed 10-15 planes. Thus, Babak Taghavaee claims that in the 204<sup>th</sup> Brigade there were nine MiG-29s, three MiG-29UB combat-capable training aircraft, and four L-39M1s.<sup>8</sup> And according to Anton Lavrov, fewer than ten planes were suitable for flying, including four or six MiG-29s and four L-39M1s.<sup>9</sup> The numbers given by Oleksandr Kotlobovskiy and Rostyslav Maraiev are even lower: according to their data, only four MiG-29s and one L-39M1 were capable of fighting in the 204<sup>th</sup> Brigade.<sup>10</sup>

Another Ukrainian aviation unit in Crimea was the 10<sup>th</sup> Marine Aviation Brigade stationed at the Saki-Novofedorivka airfield. Formed in 2004 as a result of the reorganisation and reduction of the Ukrainian Navy, it united all aircraft of the Ukrainian Navy. The Brigade consisted of two squadrons (aeroplanes and helicopters), specialised support units and a parachute rescue team.<sup>11</sup> Formally, the Brigade had 13 aircraft (ten Be-12 amphibious patrol aircraft and three transport aircraft – two An-26s and one An-2) and 19 helicopters (nine Ka-27s, four Ka-29s, four Mi-14s, and two Mi-8s). However, only three aircraft (two An-26s and one Be-12) and five helicopters (three Mi-14s and two Ka-27s) were operational.<sup>12</sup>

The aircraft of the other Ukrainian military and paramilitary agencies – the Land Forces, the State Border Guard Service, and the State Emergency Service – were not permanently stationed in Crimea. However, their helicopters and aeroplanes periodically were used on the peninsula – for example, to participate in military exercises or tests. Furthermore, at the beginning of 2014, two aviation units were located near Crimea. In particular, the 299<sup>th</sup> Tactical Aviation Brigade armed with Su-25 attack aircraft was stationed at the Mykolaiv-Kulbakine airfield.<sup>13</sup> It is the only unit in the Air Force of Ukraine equipped with close air

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<sup>7</sup> B. Taghavaee, *Be'lbeek. Ukraine's last...*, p. 93.

<sup>8</sup> B. Taghavaee, *Ukraine's Defenders; MiG-29s of the Ukrainian Air Force*, in "Combat Aircraft Monthly", 2014, No. 5, p. 77.

<sup>9</sup> A. Lavrov, *Russian Again...*, p. 159.

<sup>10</sup> A. Kotlobovskiy, R. Maraiev. *Nevozmozhnaya vojna...*, c. 1.

<sup>11</sup> A. Kharuk, *Lotnictwo morskie Ukrainy...*, p. 191.

<sup>12</sup> *Ibid.*, p. 194-195.

<sup>13</sup> A. Golz, R. Cooper, *Ukraine's attack workhorse*, in "Combat Aircraft Monthly", 2017, No. 6, p. 75.

support aircraft. The 11<sup>th</sup> Army Aviation Brigade of the Land Forces was stationed at the Kherson–Chornobaivka airfield armed with Mi-24 attack helicopters and Mi-8 transport helicopters.<sup>14</sup> The primary purpose of this unit was to interact with the 79<sup>th</sup> airmobile Brigade (Mykolaiv). In addition, a separate aviation squadron of the State Border Guard Service (DA 42NG patrol aircraft, An-24RV transport aircraft, and helicopters Mi-8) was deployed in Odesa. It provided air patrolling of the state border and the maritime exclusive economic zone.

As a result of the constant lack of funding, the Air Force of Ukraine was in poor condition on the day before the Russian invasion. According to Sean Wilson, 15-20 MiG-29 and 16 Su-27 fighters, 10-12 Su-24M bombers, and Su-24MR reconnaissance aircraft, and 14-18 Su-25 attack aircraft were combat-capable in early 2014.<sup>15</sup> The most recent was built in 1991, and most of them had not been modernised.

Following the interstate agreements, Russian troops, or more precisely, the Black Sea Fleet units, were present in Crimea. The Constitution of Ukraine (Article 17), adopted on June 28, 1996, prohibits the deployment of foreign military bases on the territory of Ukraine.<sup>16</sup> The Russian Black Sea Fleet, on the other hand, was granted an exception. After several years of negotiations, an agreement on the conditions for the Russian Fleet to be based in Ukraine was signed on May 28, 1997.<sup>17</sup> The agreement's term was set at 20 years – until 2017. On the same day, another agreement<sup>18</sup> was reached, which included the right of the Black Sea Fleet to use Hvardiiske as an airfield in Crimea (13 km north of Simferopol and Kacha (in Sevastopol)). Finally, on April 21, 2010, an agreement was made that prolonged

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<sup>14</sup> S. Zagdański, *Ukraińskie śmigłowcy armijne* [Ukrainian army helicopters], in "Lotnictwo", 2014, No. 1, p. 73.

<sup>15</sup> S. Wilson, *Before the revolution Ukraine's Air Force*, in "Air Forces Monthly", 2014, No. 5, p. 78-84.

<sup>16</sup> *Konstytutsiia Ukrainy* [Constitution of Ukraine], in <https://zakon.rada.gov.ua/laws/show/254%D0%BA/96-%D0%B2%D1%80#Text> (Accessed 25.03.2021).

<sup>17</sup> *Uhoda mizh Ukrainoiu ta Rosiiskoiu Federatsiieiu pro status ta umovy perebuvannia Chornomorskoho flotu Rosiiskoi Federatsii na terytorii Ukrainy vid 28.05.1997 r.* [Agreement between Ukraine and the Russian Federation on the status and conditions of stay of the Black Sea Fleet of the Russian Federation on the territory of Ukraine dated May 28, 1997], in [https://zakon.rada.gov.ua/laws/show/643\\_076#Text](https://zakon.rada.gov.ua/laws/show/643_076#Text) (Accessed 25.03.2021).

<sup>18</sup> *Uhoda mizh Ukrainoiu ta Rosiiskoiu Federatsiieiu pro parametry podilu Chornomorskoho flotu vid 28.05.1997 r.* [Agreement between Ukraine and the Russian Federation on the parameters of the division of the Black Sea Fleet dated 28.05.1997], in [https://zakon.rada.gov.ua/laws/show/643\\_075#Text](https://zakon.rada.gov.ua/laws/show/643_075#Text) (Accessed 25.03.2021).

the deployment of the Russian Black Sea Fleet in Crimea until 2042.<sup>19</sup>

According to the agreements signed on May 24, 1997, the modernisation of the Black Sea Fleet stationed in Crimea remained under the consideration of the Ukrainian side. Ukraine blocked all Russian attempts to improve the air forces units located at Crimean airfields for some time. Therefore, obsolete types of aircraft that had already been withdrawn from service in all the other parts of Russian military aviation, such as Su-17M4 fighter-bombers and Be-12 anti-submarine aircraft, continued to be operated by the Black Sea Fleet aviation. In 2000 Ukraine unblocked the process of renewing the Black Sea Fleet aviation in Crimea. In particular, that allowed replacing Su-17M4 aircraft with more modern Su-24 bombers and Su-24MR reconnaissance aircraft.<sup>20</sup> Colonel Hennadii Zahonov commanded the aviation of the Black Sea Fleet, and the commander of the 7057<sup>th</sup> Air Base was Lieutenant Colonel Anatolii Stepanov.<sup>21</sup>

During the reorganisation of the Black Sea Fleet in December 2011, all aviation units stationed in Crimea were integrated into a single structure, the 7057<sup>th</sup> Air Base.<sup>22</sup> It included three squadrons, two of which were deployed at the Kacha airfield (a mixed aviation group comprised of An-26 transport aircraft and Be-12 anti-submarine aircraft, a helicopter group consisting of approximately 20 helicopters Ka-27 and Mi-8), and the third – an assault squadron – in Hvardiiske (Su-24 bombers and Su-24MR reconnaissance aircraft).<sup>23</sup>

Russia concentrated a much more powerful aviation group in the Southern Military District near Crimea, the territories of Krasnodar and Stavropol, and the Rostov region. Several bases of the 4<sup>th</sup> Air Force and Air Defence Command were located there, including the airfields of Krymsk, Millerovo, Primorsko-Akhtarsk,

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<sup>19</sup> *Uhoda mizh Ukrainoiu ta Rosiiskoiu Federatsiieiu z pytan perebuvannia Chornomorskoho flotu Rosiiskoi Federatsii na terytorii Ukrainy vid 21.04.2010 r.* [Agreement between Ukraine and the Russian Federation on the stay of the Black Sea Fleet of the Russian Federation on the territory of Ukraine dated April 21, 2010], in [https://zakon.rada.gov.ua/laws/show/643\\_359#Text](https://zakon.rada.gov.ua/laws/show/643_359#Text) (Accessed 25.03.2021).

<sup>20</sup> Drushlyakov V., *Kryl'ya Chernomorskogo flota Rossii* [Wings of the Russian Black Sea Fleet], in "Vzlyot", 2006, No. 12, c. 22.

<sup>21</sup> D. Boltenkov, *Home of the Black Sea Fleet...*, p. 147.

<sup>22</sup> *Edinaya baza morskoy aviacii sozdana na Chernomorskom flote RF* [A unified naval aviation base created at the Black Sea Fleet of the Russian Federation], in <https://ria.ru/20111219/520805971.html>. [A unified naval aviation base created at the Black Sea Fleet of the Russian Federation], in <https://ria.ru/20111219/520805971.html> (Accessed 25.03.2021).

<sup>23</sup> I. Voukadinov, *Crisis on Crimean...*, p. 87.

Budionnovsk, and others. Each of these bases roughly matched the Ukrainian tactical aviation brigade in terms of quantity, but the real combat potential was significantly higher. Russia substantially renewed the structure of those units in the years preceding the occupation of Crimea. As of the beginning of 2014, more than 200 pieces of aircraft - new and modernised planes and helicopters (50% of the entire fleet) were operated in the units of the 4<sup>th</sup> Command. Over forty of them arrived in 2013. In particular, the share of new helicopters in army aviation (which played a significant role in the campaign to occupy Crimea) reached 90%.<sup>24</sup> At the very least, the military aviation facility at Korenovsk airfield is an example of a thorough approach to fleet renewal. It acquired new Mi-28N attack helicopters in 2010, Mi-8AMTSh transport helicopters started arriving in 2011, the first Mi-35M arrived in 2012, and by spring 2013 the base had received 16 Ka-52 helicopters.<sup>25</sup> Thus, outdated helicopters such as attack Mi-24 and transport Mi-8 of early modifications were wholly replaced in Korenovsk. Meanwhile, such aircraft remained in service with Ukraine's army aviation, with no plans to replace them.

#### AVIATION'S ACTIVE PARTICIPATION IN THE OCCUPATION OF CRIMEA

The Russian-planned operation to seize Crimea required the rapid transfer of additional military units to the peninsula, as the forces of the 810<sup>th</sup> separate Marine Brigade of the Black Sea Fleet deployed in Crimea were insufficient to block all Ukrainian garrisons. Such a transfer could be conducted only with the help of military transport aircraft. On February 26, 2014, Russian Federation President Vladimir Putin ordered a "surprise inspection of operational readiness" of the Western Military District troops and, to a lesser extent, the Central Military District. As part of this "inspection", about 40 Il-76 military transport planes took off from Ulyanovsk Air Base on February 26 and 27. More than 10 of them landed at the Anapa Airport on the Caucasus coast, near Crimea.<sup>26</sup> The active phase of the operation to seize Crimea began at 4:30 a.m. on February 27, when about 50-100 gunmen seized Crimean Parliament in Simferopol and raised a Russian flag over the building.<sup>27</sup>

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<sup>24</sup> *Dolya novykh vertoletov v armejskoj aviacii YuVO sostavlyayet bolee 90%* [The share of new helicopters in the army aviation of the SMD is more than 90%], in <https://sc.mil.ru/social/sport/news/more.htm?id=11975125@egNews> (Accessed 26.03.2021).

<sup>25</sup> *Ka-52 – teper' i na Kubani* [Ka-52 – now in the Kuban], in "Vzlyot", 2013, No. 4, c. 38.

<sup>26</sup> A. Lavrov, *Russian Again...*, p. 162.

<sup>27</sup> P. Hai-Nyzhnyk, *Okupatsiia ta aneksiia Krymu Rosiiskoiu Federatsiieiu...*, c. 112.



On the morning of February 28, at least 13 Russian Il-76 planes landed at the Hvardiiske airfield deploying about 2000 paratroopers.<sup>28</sup> According to other sources, about 8 Il-76 aircraft landed at the airport that day.<sup>29</sup>

The invading forces were transferred by air and partly by sea, via amphibious assault ships of the Black Sea Fleet and ferries of the Kerch Sea ferry system, due to the availability of airfields on the peninsula controlled by the Black Sea Fleet, allowing them to avoid the traditional parachute landing. In total, 11 battalion tactical groups of airborne troops comprising nearly 6000 people were transferred to Crimea. About half of the forces were involved in the peninsula occupation.<sup>30</sup> Ukrainian air defence and fighter aircraft remained passive without receiving any explicit instructions from the country's military-political leadership. The only reaction was the deployment of two Su-27 fighters from mainland Ukraine. The planes were in the air a few hours after the Russians had started landing but did not interfere with the actions of the Russians.<sup>31</sup> According to other sources, there were at least two cases of interception of Russian aircraft by Ukrainian Su-27 fighters: on the night of March 1, they forced Il-76 aircraft to leave Ukrainian airspace, and on the night of March 2, two Russian fighters were "forced out".<sup>32</sup>

The Ukrainian air defence's passivity allowed the Russians to deploy attack helicopters to Crimea. The Black Sea Fleet's aircraft stationed in Crimea did not have such aircraft, but they were needed to block the Ukrainian garrisons and ships. On the morning of February 28, a group of Russian helicopters (eight Mi-35Ms and three Mi-8s) flying from the side of Anapa violated the state border of Ukraine in the Kerch region. They landed at the Black Sea Fleet's airfield Kacha.<sup>33</sup> From February 28 to March 11, the State Border Guard Service registered 14 occurrences of violations of Ukraine's state border in Crimea by groups or single units of Russian aircraft. Unauthorised landings at Crimean airfields were made by 48 planes and helicopters.<sup>34</sup> These statistics may be incomplete.

One of the priority tasks assigned to the Russian troops operating without identification marks (the so-called "green men") was to block the Belbek airfield. At about 15:00 on February 28, a convoy consisting of three Russian armoured

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<sup>28</sup> *Crisis in Crimea...*, p. 5.

<sup>29</sup> Büttner, P. Roegies, *Crisis in Crimea...*, p. 69.

<sup>30</sup> M. Depczyński, *Zmiany w rosyjskich Wojskach Powietrznodesantowych* [Changes in the Russian Airborne Forces], in "Nowa Technika Wojskowa", 2021, No. 3, p. 25.

<sup>31</sup> A. Lavrov, *Russian Again...*, p. 165.

<sup>32</sup> A. Kotlobovskiy, R. Maraiev. *Nevozmozhnaya vojna...*, c. 22.

<sup>33</sup> Büttner, P. Roegies, *Crisis in Crimea...*, p. 70.

<sup>34</sup> P. Hai-Nyzhnyk, *Okupatsiia ta aneksiia Krymu Rosiiskoiu Federatsiieiu...*, c. 118.

personnel carriers and ten trucks arrived at this airfield. The “green men” entered the facility through unguarded technical gates and blocked the runway, the aircraft parking zone, and the ammunition depot. Around the same time, a company of Russian soldiers seized Simferopol civil airport and its dispatch office. On March 1, the Russians blocked all three Ukrainian anti-aircraft missile regiments and several air-defence radar posts.<sup>35</sup> Novofedorivka airfield, where the 10<sup>th</sup> Marine Aviation Brigade was located, had also been secured. Attention should be paid to the fact that on February 27, the 204<sup>th</sup> Tactical Aviation Brigade announced a high alert and informed about a possible relocation to another airfield but did not receive an execution order.<sup>36</sup>

According to Acting Minister of Defence of Ukraine Ihor Teniukh, at the time of the Russian invasion, Ukraine had 15000 servicemen, but only 1500-2000 of them were ready to carry out the order to use weapons.<sup>37</sup> On March 1, 2014, Acting President of Ukraine Oleksandr Turchynov appointed Rear Admiral Denys Berezovsky as Commander of the Ukrainian Navy. This was a key position because all Ukrainian troops in Crimea were directly or operatively subordinated to him. However, the next day Denys Berezovsky betrayed the oath by siding with the aggressor. He ordered the Ukrainian military units in Crimea not to resist Russian Federation troops and to lay down their arms.<sup>38</sup>

The further fate of the Ukrainian air units blocked in Crimea depended entirely on the initiative of their commanders and the decision of the personnel. The commanders of both air brigades stationed on the peninsula did not obey Berezovsky's order and tried to oppose the Russians, and their chosen tactics proved superior. The 10<sup>th</sup> Marine Aviation Brigade commander, Colonel Ihor Bedzai, attempted to protect the equipment from being captured by the Russians by flying all the capable aircraft (three) and helicopters (four) to the mainland of Ukraine. The destinations were Odesa International Airport and Mykolaiv-Kulbakine Air Base. The latter was chosen since it was closer to Novofedorivka.<sup>39</sup> A favourable moment came on March 3, when the weather was appropriate. At

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<sup>35</sup> A. Lavrov, *Russian Again...*, p. 165-166.

<sup>36</sup> M. Gawęda, *MiG-29 w konflikcie o Donbas* [MiG-29 in conflict over Donbas], in “Lotnictwo Aviation International”, 2018, No. 2, p. 60.

<sup>37</sup> P. Hai-Nyzhnyk, *Okupatsiia ta aneksiia Krymu Rosiiskoju Federatsiieiu...*, c. 115.

<sup>38</sup> *Berezovskiyi buv vidstoronenyi shche vrantsi – za nakaz ne chynyty oporu viiskam RF i sklasyt zbroiu* [Berezovsky was removed in the morning – for the order not to resist the troops of the RF and to lay down the weapon], in <https://www.pravda.com.ua/news/2014/03/2/7017112/> (Accessed 02.04.2021).

<sup>39</sup> V. Trendafilovski, *Crimea's Unsung Heroes...*, p. 76.

10:45 four helicopters (Ka-27PL, Mi-14PS, and two Mi-14PLs) began to warm up the engines and in a few minutes one after another took off from the sites in the northern part of the base. In five minutes, two An-26s were taken to the runway and flew toward the sea with a two-minute interval. Then the Be-12PL took off in the opposite direction.<sup>40</sup> The whole operation lasted no more than 20 minutes, and Russian troops blocking the airfield could not prevent it. To intercept Ukrainian helicopters, the Russians sent two Mi-35Ms from Hvardiiske airfield, but they were unable to detect their targets because the Ukrainian helicopters were flying at low altitudes along the coastline, keeping radio silence. All four helicopters and three planes landed safely in Kulbakine. On March 7, another Ka-27PL helicopter was moved from Novofedorivka to Kulbakine, and again the Russians were unable to prevent it.<sup>41</sup> As a result of the active position of the commander of the 10<sup>th</sup> Marine Aviation Brigade and his subordinates, all serviceable planes and helicopters were able to be evacuated to the mainland of Ukraine. That was Ukraine's first victory in its battle against Russian aggression.

The situation was evolving differently at the Belbek airfield, where the 204<sup>th</sup> Tactical Aviation Brigade was stationed. Colonel Yulii Mamchur, Brigade Commander, resorted to psychological warfare on March 4 by leading a group of unarmed personnel to the parking grounds of Russian-controlled planes. Ukrainian military marched while singing the national anthem beneath the State and Brigade flags.<sup>42</sup> Mamchur gained notoriety as a result of this effort, but it provided little practical advantage as all of the 204<sup>th</sup> Brigade's planes remained under Russian control.<sup>43</sup>

Ukraine's military-political leadership responded to Russia's occupation of Crimea by urging the international community to condemn Russia's aggression. Military actions were taken in a variety of directions. To begin, the Ukrainian side made every effort to retain the garrisons and military sites in Crimea under its control, which had been isolated and obstructed by the Russians. On March 4, Crimean separatist leadership issued an ultimatum demanding that Ukrainians choose sides with the separatists, abandon their bases and ships, or face being assaulted by "self-defence detachments." However, the Ukrainian side decided not to respond to this ultimatum.<sup>44</sup> Secondly, the air defence system in the south of

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<sup>40</sup> V. Trendafilovski, *Ukraińscy lotnicy morscy...*, p. 70-72.

<sup>41</sup> A. Kharuk, *Lotnictwo morskie Ukrainy...*, p. 193-194.

<sup>42</sup> A. Kotlovovskiy, R. Maraiev. *Nevozmozhnaya vojna...*, c. 22.

<sup>43</sup> *Russian forces take over...*, p. 5.

<sup>44</sup> A. Lavrov, *Russian Again...*, p. 169.

Ukraine had to be restored. Four Su-27 fighters from the 801<sup>st</sup> Tactical Aviation Brigade were redeployed from Myrhorod to Kulbakine airfield for this purpose.<sup>45</sup> Thirdly, the Armed Forces of Ukraine on mainland Ukraine were placed on alert, anticipating a surge in Russian aggression. For military aviation, it meant intensifying training flights and putting at least a part of the available planes and helicopters on alert as soon as possible.

Despite the aggravation of the situation and the inability of the Ukrainian Armed Forces to repel full-scale Russian aggression, the Ukrainian command did not attempt to fly military aircraft or helicopters in the airspace over Crimea. Instead, helicopters of the State Emergency Service continued to operate in the area.

The incident on March 6, 2014, when the Mi-8 helicopter of this service landed on the site of the Sevastopol aircraft repair plant on the shore of Krugla bay, became widely known. The helicopter took a group of journalists to Sevastopol, but its crew was detained by “unknown persons”, and two Russian Mi-35Ms that had taken off from Kacha airfield appeared over the site. Eventually, the incident was settled peacefully, and the helicopter transporting journalists took off for mainland Ukraine that evening. Two Russian Mi-35Ms accompanied it.<sup>46</sup> State Emergency Service Mi-8 helicopters flew over Crimea, and later – for example, on March 8, such a helicopter delivered a diesel generator to the garrison in Feodosiya where the Ukrainian Marine Battalion had been blocked.

The State Border Guard Service’s aviation was another active participant. On March 8, one of its DA 42NG planes came upon small-arms fire while patrolling over the Perekop Isthmus. The helicopter flew down to a very low altitude and was able to avoid getting shot with a sharp turn.

On March 15, Russia launched military operations along the border between occupied Crimea and mainland Ukraine. At about 1 p.m., about 120 paratroopers from two groups of Mi-8 helicopters (four and six helicopters) landed near Strilkove town. They took control of the nearby gas infrastructure. Strilkove is located on the Spit of Arbatska Strilka and does not belong to the Autonomous Republic of Crimea but rather the Kherson region. The State Border Guard Service Units and the Armed Forces of Ukraine blocked the paratroopers. Russian Mi-35M attack helicopters with suspended missile blocks performed demonstration flights near Ukrainian checkpoints. The Russian occupation of the Strilkove district lasted until December 2014.

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<sup>45</sup> V. Trendafilovski, *Ukraine Crisis Report*, in “Air Forces Monthly”, 2014, No. 6, P. 6.

<sup>46</sup> Büttner, P. Roegies, *Crisis in Crimea...*, p. 71.

For two weeks, the situation in Crimea remained uncertain. Russia continued to deploy additional troops to the peninsula, including those armed with heavy weaponry (artillery, multiple launcher systems, and mobile coastal anti-ship missile systems). Ukraine's previously minimal odds of retaking Crimea by force have now become close to none. On the other hand, the Russian Federation strived to complete the process of incorporating the occupied territories as soon as possible. On March 16, 2014, a "referendum" was held in Crimea on the status of the Autonomous Republic of Crimea and the city of Sevastopol, which was organised in violation of Ukraine's Constitution and the position of the UN Security Council. On March 18, an agreement for the admission of Crimea and Sevastopol to the Russian Federation was signed in Moscow. The position of Ukrainian forces in Crimea had deteriorated to the point that the Russian government saw every reason to seize Ukrainian garrisons and ships by force.

The Russians began taking intense action on March 19. Special Forces units took control of several command posts, including the Ukrainian Navy headquarters (where Navy Commander Rear Admiral Serhii Haiduk had been appointed to replace deserter Berezovskyi) and a reserve command post of the "Crimea" tactical group.<sup>47</sup> Ukrainian garrisons and ships were taken over one by one, mostly without resistance. Ukrainian Airbases Belbek and Novofedorivka were captured on March 22. In other cases, the Russians became forced to use the aircraft. On March 24, two Mi-35M and two Mi-8 helicopters were involved in the capture of the military Marine Battalion in the town of Feodosiya. The next day, two Mi-35Ms engaged in the last attack on the Ukrainian ship in Crimea, the minesweeper "Cherkasy." The helicopters did not deploy ammunition on either occasion, putting psychological pressure on the Ukrainian troops.<sup>48</sup> It is worth noting that all aircraft were transferred from Russia in all cases (whether troops were deployed to Crimea or helicopters were used to blockade Ukrainian garrisons). There is no evidence of the use of aircraft or helicopters from the 7057th Air Base. This unit appeared to be solely responsible for logistical support. These functions proved crucial in assisting the troops that took part in the occupation. It was no surprise that all personnel at the 7057th Air Base were awarded medals "For the occupation of Crimea".<sup>49</sup>

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<sup>47</sup> A. Lavrov, *Russian Again...*, p. 175.

<sup>48</sup> A. Kotlobovskyi, R. Maraiev. *Nevozmozhnaya vojna...*, c. 1.

<sup>49</sup> *7057-ma aviabaza morskoi aviatsii ChF RF u povnomu skladi bula nahorodzhena medaliamy za okupatsiiu Krymu* [The entire 7057th naval air base of the Black Sea Fleet of the Russian Federation was awarded medals for the occupation of Crimea], in

## CONSEQUENCES OF THE OCCUPATION OF CRIMEA ON MILITARY AVIATION

On March 24, 2014, Acting President of Ukraine Oleksandr Turchinov ordered the evacuation of the Ukrainian troops from occupied Crimea to the mainland of Ukraine.<sup>50</sup> Both Ukrainian air brigades were evacuated by land to the nearest airbase Kulbakine in Crimea. More than half of the 10th Marine Aviation Brigade personnel, which at that time totalled 850 people, remained loyal to Ukraine and retreated to the mainland. This process ended on April 9. However, at Novofedorivka, 89 technicians were still engaged in preparing aircraft and other equipment for shipment.<sup>51</sup> Major Stanislav Karachevskiy, a serviceman of the 10<sup>th</sup> Marine Aviation Brigade, was killed while preparing to leave for the mainland of Ukraine. On April 6, he was shot dead by a Russian Marine. The murder took place outside of the service at the dormitory where Major Karachevsky lived.<sup>52</sup>

The last soldiers of the tactical group "Crimea" left the peninsula on April 11, except for technical specialists who provided equipment evacuation.<sup>53</sup> Many personnel (mainly locals) chose to remain in Crimea and join the Russian army.

Road transport has been used to move aircraft and helicopters from Crimea. Groups of technicians partially dismantled some parts of planes and helicopters. For example, they disconnected wing consoles and keels and removed engines and radars from the MiG-29. The fuselage was loaded onto a dedicated trailer while the remaining components were transported separately. One fighter took three to five days to dismantle.<sup>54</sup>

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<https://informnapalm.org/ua/7057-ma-aviabaza-morskoi-aviatsii-chf-rf-u-p/>  
(Accessed 05.04.2021).

<sup>50</sup> A. Kharuk, *Lotnictwo morskie Ukrainy...*, p. 195.

<sup>51</sup> V. Trendafilovski, *Ukraińscy lotnicy morscy...*, p. 73.

<sup>52</sup> M. Kosheliev, *Kryvava aneksiia bez "zhodnoho postrilu"* [Bloody annexation without "a single shot"], in <https://hromadske.ua/posts/richnycya-aneksii-krimu> (Accessed 05.04.2021).

<sup>53</sup> *Okupovanu terytoriiu zalyshaie taktychna hrupa "Krym" Povitrianykh Syl ZSU* [The occupied territory is left by the tactical group "Crimea" of the Air Force of the Armed Forces of Ukraine], in [https://www.ukrinform.ua/rubric-polytics/1646985-okupovanu\\_teritoriyu\\_zalishae\\_taktichna\\_grupa\\_krim\\_povitryanih\\_sil\\_zsu\\_1928239.html](https://www.ukrinform.ua/rubric-polytics/1646985-okupovanu_teritoriyu_zalishae_taktichna_grupa_krim_povitryanih_sil_zsu_1928239.html) (Accessed 03.04.2021).

<sup>54</sup> *"V Khersoni stalo dykhaty lehshe": yak zalyshala Krym 204 Sevastopolska bryhada taktychnoi aviatsii* ["It became easier to breathe in Kherson": how the 204<sup>th</sup> Sevastopol Tactical Aviation Brigade left Crimea], in <https://www.armyfm.com.ua/v-hersoni->

The evacuation of aircraft lasted until early June 2014, when the Russian Federation suspended it under the pretext of the Anti-Terrorist Operation in eastern Ukraine. By that time, 82 aircraft had been evacuated from Crimea – 59 planes and 23 helicopters. Six aircraft (five Be-12s and one An-2) and 14 helicopters (seven Ka-27s, four Ka-29s, two Mi-8s, and one Mi-14) belonged to the 10<sup>th</sup> Marine Aviation Brigade. Only four unusable Be-12s and one Mi-8 were not able to be removed in time.<sup>55</sup> The 204<sup>th</sup> Tactical Aviation Brigade managed to evacuate 43 MiG-29 and MiG-29UB fighters (including seven aircraft from the former aerobatic team “Ukrainian Falcons” that were under conservation at the Kirovske airfield) and one L-39M1. The Brigade had 12 aircraft left in Crimea – seven MiG-29s, two MiG-29UBs, and three L-39M1s.<sup>56</sup> The rest of the evacuated aircraft – nine different types of planes and seven helicopters – belonged to the State Aviation Research Centre.

The evacuated units’ operational readiness had to be restored as soon as possible. The situation was more manageable with the 10<sup>th</sup> Marine Aviation Brigade because several of its planes and helicopters had returned from Crimea in flying conditions in early March. Two other aircraft were quickly restored: search and rescue amphibious Be-12PS and light transport aircraft An-2 evacuated by ground transport. However, restoring the helicopters was more difficult since, before the occupation of Crimea, Ka-27 and Mi-14 aircraft were repaired at the factory in Sevastopol.<sup>57</sup> On April 24, the crews of the 10<sup>th</sup> Brigade resumed An-26 and Be-12 training flights. In addition, in September 2014, planes Be-12 and helicopters Ka-27 took part in the multinational exercises “Sea Breeze 2014”.<sup>58</sup>

It was significantly difficult to restore even the 204<sup>th</sup> Tactical Aviation Brigade’s bare combat capacity – after all, none of its aircraft taken out of Crimea was suitable for flight. In April 2014, as a temporary measure, a group of pilots from this Brigade was relocated to Vasylkiv, near Kyiv, where the 40<sup>th</sup> Tactical Aviation Brigade was stationed. On April 11, pilots from the 204<sup>th</sup> Brigade began flights uti-

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dihati-stalo-legshe-yak-zalishala-krim-204-sevastopolska-brigada-taktichnoi-aviacii/ (Accessed 03.04.2021).

<sup>55</sup> V. Trendafilovski, *Crimea's Unsung Heroes...*, p. 79.

<sup>56</sup> *Polkovnyk Mamchur: nam ne povernuly dvanadtsiat boiovykh litakiv* [Colonel Mamchur: Twelve combat airplanes were not returned to us], in [http://www.ukrinform.ua/rubric-other\\_news/1676146-polkovnik\\_mamchur\\_nam\\_ne\\_povernuli\\_12\\_boiovih\\_litakiv\\_1948277.html](http://www.ukrinform.ua/rubric-other_news/1676146-polkovnik_mamchur_nam_ne_povernuli_12_boiovih_litakiv_1948277.html) (Accessed 03.04.2021).

<sup>57</sup> V. Trendafilovski, *Ukraińscy lotnicy morscy...*, p. 74.

<sup>58</sup> “Si Bryz – 2014”. *Morska y aviatsiina fazy* [“Sea Breeze – 2014”. Marine and aviation phases], in <https://odessactrs.livejournal.com/31788.html> (Accessed 03.04.2021).

lizing this unit's MiG-29 to improve their flying abilities. The first MiG-29 mounted in Kulbakine after the evacuation from Crimea flew on July 31, 2014. The first MiG-29UB took off the next day.<sup>59</sup> However, the vast majority of fighters taken out of Crimea could not be restored by the technical staff of the Brigade – they needed repairing at the aircraft repair factory. Therefore, the process of restoring the combat capability of the 204<sup>th</sup> Tactical Aviation Brigade took several years.

The Russian Federation quickly created a potent aviation group in Crimea. Already in March 2014, four Su-27 fighters assigned from the 3<sup>rd</sup> Guards Mixed Air Regiment (Krymsk airbase) took up combat duty at the Gvardiiske airfield. And on June 1, 2014, the territory of the occupied Crimea was officially included in the area of responsibility of the 4<sup>th</sup> Air Force and Air Defence Command.<sup>60</sup> In July, the four Su-27 fighters were replaced by three new Su-30M2 fighters relocated to the former Belbek airfield in Ukraine. It was the first stage of the 38<sup>th</sup> Fighter Regiment formation in August 2014, later improved by five planes Su-27P and one Su-27UB transferred from the 159<sup>th</sup> Fighter Regiment (Besovets Air Base in Northern Russia), and upgraded Su-27SMs and two Su-27UBs arrived on December 12 from the Far East. Aircraft delivery continued, and as of 2016, the regiment had 31 aircraft (12 Su-27s, 12 Su-27SMs, two Su-27UBs, and five Su-30M2s).<sup>61</sup> In November 2014, the 37<sup>th</sup> Mixed Air Regiment (12 bombers Su-24M and 12 attack aircraft Su-25SM) was formed at the Hvardiiske airfield, and in December the 39<sup>th</sup> Helicopter Regiment was formed at the Dzhankoi Airfield. Its first squadron received 12 Ka-52 helicopters, its second acquired 12 Mi-35Ms and four Mi-28Ns, and its third squadron received 12 Mi-8AMTShs.<sup>62</sup> To command the regiments, the headquarters of the 27<sup>th</sup> Mixed Aviation Division were established at Belbek airfield.<sup>63</sup>

The 7057<sup>th</sup> Air Base of the Black Sea Fleet was decommissioned on July 1, 2013, and two regiments were formed instead. The 43<sup>rd</sup> Separate Naval Assault

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<sup>59</sup> M. Gawęda, *MiG-29 w konflikcie o Donbas...*, p. 60.

<sup>60</sup> V. Trendafilovski, *Russian military aviation in Crimea*, in "Air International", 2018, 2, p. 43.

<sup>61</sup> D. Tomenchuk, *Aviatsiia RF na tymchasovo okupovanii terytorii AR Krym ta bilia kordonu z Ukrainoiu* [Russian aviation in the temporarily occupied territory of the AR of Crimea and near the border with Ukraine], in <http://militaryaviation.in.ua/uk/2018/12/04/aviatsiyi-rf-na-timchasovo-okupovaniy-teritoriyi-ar-krim-ta-bilya-kordonu-z-ukrayinoyu/> (Accessed 05.04.2021).

<sup>62</sup> V. Trendafilovski, *op. cit.*, p. 44.

<sup>63</sup> *Glavkom VVS: v Krymu razvernuta smeshannaya aviadiviziya* [Commander-in-Chief of the Air Force: a mixed air division has been deployed in Crimea], in <https://ria.ru/20150430/1061935898.html> (Accessed 05.04.2021).



Air Regiment was deployed at the former Ukrainian Saki-Novofedorivka airfield. By 2016, the old Su-24 bombers had been replaced by Su-24M bombers and new Su-30SM multi-purpose aircraft. The 318<sup>th</sup> Separate Mixed Air-Regiment was formed with An-26, Be-12 planes and helicopters stationed at Kachi.<sup>64</sup> As a consequence, the Russian Federation dispatched a formidable aviation force (five regiments) in Crimea, consisting of 110 combat aircraft and 60 helicopters.<sup>65</sup>

## **CONCLUSIONS**

The Russian Federation's occupation of Crimea in February-March 2014 was carried out with the active employment of aircraft. At the outset, the operations of military transport aircraft were crucial – their task was to bring additional military contingents to the peninsula. Later, until the order to evacuate Ukrainian troops from Crimea was given, helicopters, mainly attack helicopters, played the crucial role, exerting psychological pressure on the blocked Ukrainian garrisons and ship crews. Because the Ukrainian side did not reply with armed resistance, jet combat aircraft were also never deployed.

Ukrainian aviation remained largely inactive throughout the occupation of Crimea, except for the 10<sup>th</sup> Marine Aviation Brigade flying planes and helicopters to Ukraine's mainland. The contributing factors were the command's indecision, the large part of the personnel's wait-and-see approach (residents), and the aircraft's inadequate condition (most planes and helicopters were unsuitable for flying).

Following the evacuation of the aviation units from Crimea, the Ukrainian side had to devote a significant amount of time and effort to restore at least a partial combat capability. On the other hand, Russia relying on its resources soon transformed Crimea into a kind of "unsinkable aircraft carrier", deploying several aviation regiments equipped with modern aeroplanes and helicopters.

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<sup>64</sup> V. Trendafilovski, *op. cit.*, p. 45-47.

<sup>65</sup> *Informe ucraniano sobre la militarización de Crimea*, in <http://fuerzasmilitares.es/informe-ucraniano-sobre-la-militarizacion-de-crimea> (Accessed 05.04.2021).

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