

Air Power in the Russian–Ukrainian War: Myths and Lessons Learned

View from the Command Post

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Editor's note: The JAPCC is presenting this article as a personal account from the Ukraine Air Chief and staff in their own words to further the public discourse on the war in Ukraine. The views expressed are those of the authors concerned, without endorsement by the JAPCC or NATO.

We are truly grateful for their insights and first-hand experiences. Please refer to our Disclaimer/ToRs in the imprint.

*'Outnumbered and outgunned,
we continue to fly, fight, and win.'*

Ghosts of Ukraine

In the winter of 2021–2022, the entire world became an unwilling participant while Ukraine became the hostage of Putin's geopolitical talk show. 'Kremlin's

elders' poured out threats and ultimatums unseen since past world wars. Ukraine and the West had been rejecting Moscow's demands for a new division of the world as unthinkable in the 21st century. However, being confident that a great war in Europe would 'never again' repeat and Moscow's threats were blatant blackmail, the European capitals responded rather weakly and indecisively, suffering from the energy and COVID crises and other internal issues.



Consequently, the diplomatic meetings at the highest levels turned out to be barren. On the one hand, this response irritated the Kremlin but, on the other, it persuaded Putin that the West was weak and separated, and that its values and morality were emasculated. While the American partners warned about the inevitability of war, various experts predicted the Ukrainian nation would last only a week before its collapse under the hits of 'the second army in the

world'. Being in the whirlpool of the events, Ukraine was hoping for peace whilst preparing for defence.

We were mostly all wrong. The war has indeed begun. It began unexpectedly despite all the warnings and preparations. Even at the Air Force Command Post, at the dawn of 24 February 2022, while watching the take-off and approach of the enemy's air armada and believing that our mission is to preserve peace rather

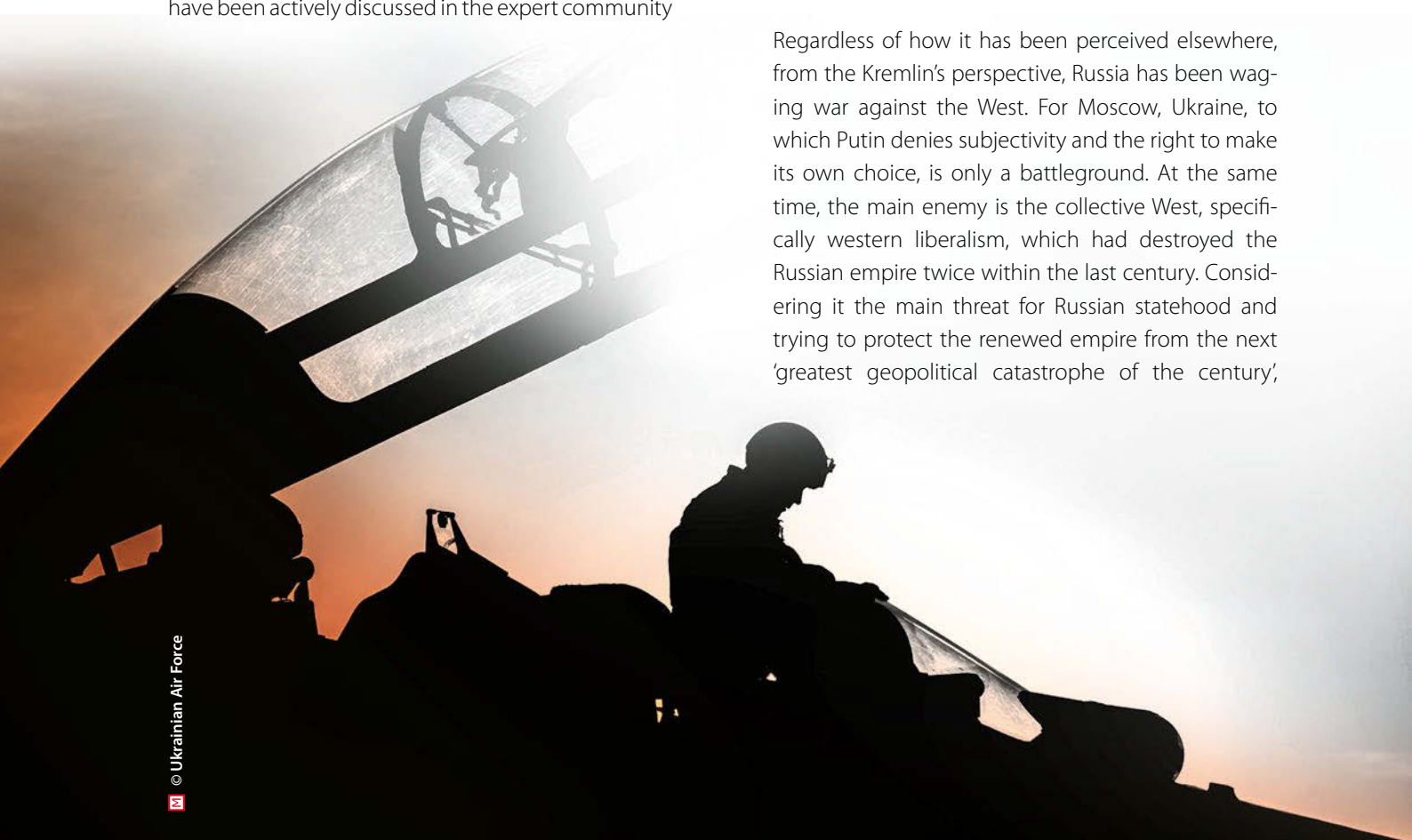
than unleash a war, we hoped that it was just another demonstrative provocation. Putin's hordes did not turn back. However, to Putin's surprise, we met them with stabbing deadly fire, not bread and salt. The war turned out to be full of unexpected events and unanswered questions. Why did Putin dare to invade? What is the role of the West in this war? Why could not 'the second army in the world' break the opponent's resistance with substantially fewer resources, manpower, and means for armed resistance? Why was the Russian Air Force – ten times larger than its Ukrainian counterpart – incapable of gaining air superiority, in fact being neutralized? Could the wide employment of layered Anti-Access/Area Denial (A2/AD) systems fracture the concept of Air Power, marking its decline and the revitalization of Land Power in the modern conflict? Can one successfully wage war without air offensive capability against an adversary who possesses it? Does Ukraine need modern combat aviation and air defence systems if the Russian Air Force can no longer exploit its offensive potential? These questions have been actively discussed in the expert community

in Ukraine and abroad. Sometimes the discussions are professional, and sometimes they are superficial. Consequently, together with the lessons learned from this war, we are now faced with a multitude of myths about the local character of this war, the 'paper tiger' and 'hollow force' of the Russian army, about the wonder weapons, unnecessary for the offensive capabilities of Ukraine if the ability to win this war is through a strategy of attrition.

Having no goal to introduce an absolute truth, in this article we aim to analyse and refute the main myths around this war. We hope that this paper will be a useful contribution to the discussion that will help to find the answers to the above questions.

Myth 1. This is a war between Russia and Ukraine, in which the West should not interfere. Russia started this war to ensure its own security within the area of its own historical interests as a response to another attempt at NATO enlargement.

Regardless of how it has been perceived elsewhere, from the Kremlin's perspective, Russia has been waging war against the West. For Moscow, Ukraine, to which Putin denies subjectivity and the right to make its own choice, is only a battleground. At the same time, the main enemy is the collective West, specifically western liberalism, which had destroyed the Russian empire twice within the last century. Considering it the main threat for Russian statehood and trying to protect the renewed empire from the next 'greatest geopolitical catastrophe of the century',



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Launch of Ukraine SA-10 systems during live fire exercises.

Putin is attempting to destroy the rule-based world order and build a multipolar one on its ruins, where liberalism would not be a threat for his regime and empire anymore. In Putin's strategy, NATO and Ukraine have become the centres of gravity.

Despite Kremlin's rhetoric, Moscow perceives NATO not as a military threat but ideological. It is not the Alliance's missiles and tanks that Putin fears but the ideas of freedom, democracy, free market, and human rights that tie the Alliance's nations together. It is not the mythical NATO military bases in Ukraine that scare the Kremlin (Russia borders five NATO countries, some of which are far closer to Moscow), but the very thought that a culturally and historically close nation would reject the ideas of the totalitarian 'Russkiy Mir' (i.e. Russian World), join the family of free democratic nations, and thus provide an example for the people of Russia. That is why Putin attacks.

Using artillery shells and missiles, he destroys our cities, economy, and civil infrastructure, effectively trying to destroy the Ukrainian identity, culture, and nation. However, he also attacks the West, its unity, democratic institutions, principles and values, economy, energy sector, and welfare – everything that

makes the West as it is. And though the citizens of Warsaw, Budapest, or Berlin do not yet hear the air raid alarms, Putin has already deprived them of the choice of 'war or peace'. The only choice left is what to sacrifice. It is either today's well-being, by helping Ukraine right now, or tomorrow's values and way of life, when the Ukrainian fortress will fall under the blows of the eastern hordes. Free nations should answer this question on their own, while we can only state that there is not much time left for doubts and speculations. The Ukrainian nation is bleeding the blood of its children and our resources are running out.

Myth 2. *The level of the Russian threat to the West is exaggerated. Russia is only another rogue nation with minor influence on world politics and economy. The West is overreacting.*

Many Western nations still largely underestimate and underreact to the Russian threat. Indeed, Russia is no longer a leading economic and political power in the world. However, Russia's challenges to the world order and economy significantly exceed Russian real input.

Firstly, as previously stated, Putin wages this war for ideological reasons. This is the war of autocracy

against democracy, tyranny against liberalism. Just as Saddam Hussein attacked Israel during Operation Desert Storm, attempting to ruin the anti-Iraqi coalition and entice Arab nations, Putin attacked the West while trying to unite the rogue nations around himself in his anti-liberal 'crusade'. Putin is not the only adversary in this battle of world views – he already has his own 'coalition'. The Belarusian dictator Lukashenko stands hand in hand with him, fully supporting the war against Ukraine and threatening Eastern Europe. He granted Russian military forces access to Belarusian military bases, airfields, and logistic centres, thus facilitating the attack against Ukraine from the north. International law clearly states such actions constitute direct participation in war. Even though the Belarusian army does not have the courage yet to directly partake in combat, Lukashenko still threatens Ukraine from the north, manoeuvring his army while missile attacks from Belarus on Ukrainian cities are ongoing. Moreover, alongside Lukashenko are the puppet regimes of Southern Ossetia and Abkhazia. Also, we already have information that Iran and North Korea provide weapons and ammunition to Russia. Although China is still in doubt about whether to finally take the way of belligerent autocracy or preserve its midway course, Putin actively engages president Xi trying to convince him that it is time. To summarize, tyrants and dictators of the world are watching how Putin brutally ruins the established world order and guessing whether their time has come.

Secondly, though Putin rejects liberalism, he does not hesitate to exploit its institutions against the West itself in his crusade. By active intervention in the political processes of the western countries, supporting marginal political powers, and conducting anti-democratic propaganda, Putin uses democratic institutions



to undermine western nations from the inside. The same approach takes place in the United Nations Security Council and other international organizations where Russia paralysed their work and used them not to preserve the values and freedom they were created to protect, but to contend with them.

Thirdly, even though the population of Russia does not exceed 2% of the world population and its contribution to the world economy is less than 3%, by controlling access to the nearly unlimited resources of the Eurasian heartland, Putin has turned raw materials into weapons. Putin's 'Russkiy Mir' is incapable of ensuring development, welfare, and fair economic competition. His tools are blackmail and crises. Hoping to crush the will of Ukrainian and western nations to resist, the Kremlin has deliberately created the world energy and food crises and openly threatens to freeze Europe in winter. That is why the West should re-evaluate the Russian threat, keeping in mind that Putin is not the only one in his crusade and noting that while the 'the pain threshold' of Moscow is substantially low, Putin is still determined to achieve his goals by exploiting Russian strengths and Western weaknesses.

Myth 3. The Russian people are not accountable for the regime's crimes and should not suffer from its consequences and sanctions; only Putin and his inner circle should.

Innocents should not suffer. However, a major portion of the Russian population is complicit with the crimes against Ukraine and, eventually, must share the responsibility with the ruling regime. Though some experts might think that Putin started this war contrary to the will of his people, it is not the correct statement. As Stalin said while interviewed by Herbert Wells: 'Even talented ruling minority is helpless unless it stands on at least the passive support of the millions of people.' It is not Putin who directs missiles at our cities, pours a rain of artillery shells and bombs on our land, rapes our women, and kills our innocent children. It is being done by thousands of scoundrels and criminals in Russian military uniforms. But what shocks us more is the level of enmity and hatred for Ukraine and the West, as well as Russian society's fanatical



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support for Putin's policy and the Russian army. Indeed, we do see silent protests of thousands of Russians who disagree on the streets of Moscow, St. Petersburg, and Novosibirsk. But, at the same time, millions of Russians silently (or frequently openly) support this war. Silence will not end violence – it only feeds it. Silence is a consent and continuation of the social contract between Putin's regime and the people, which is complicity in crime. Only the voice of disagreement on the streets of Russian cities can break the bond and, for this, the people of Russia should feel the consequences and the price of their crimes. And possibly, if the voice is loud enough, they will get the chance to rethink their destiny, which they lost when they handed power to Putin.

Myth 4. The imbalance in military and economic potentials is too big. Ukraine is incapable of gaining military victory in this war. A compromise should be reached at the negotiation table.

Any war ends at the negotiation table, but the way to it is through victories on the battlefield. Ukraine is not only capable but also has to gain these victories. If only math equations determined the outcome of wars, wars would lose any sense. 'Mathematical' calculations showed that Kyiv and all of Ukraine would

capitulate during the first week of the war. But the Ukrainian fortress has withstood the siege for almost a year and continues to grind Putin's hordes in battle because the equation of war holds not only deterministic elements but also chance, fortune, and the will of the nation to resist. So far, fortune is on our side, and Ukrainian will and confidence in our victory offset the quantitative advantages of the aggressor. Today the war has reached its equilibrium, but the support from the West should break this balance for the benefit of Ukraine.

Myth 5. Kremlin has already realized its failures and is ready for negotiations. The 'gestures of goodwill' are the invitation to agreement and peace.

The Kremlin's gestures of 'goodwill' are nothing but an effort to politically soften Russian military defeats. The retreat from Kyiv, abandonment of the Zmiinyi Island, and agreements on the grain corridors are the direct results of the successes of the Ukrainian Armed Forces. We observed the same 'gestures of goodwill' near Kharkov and Kherson. The goodwill of the Ukrainian warriors is to defeat the aggressor and liberate our country. This is the only goodwill that exists here. Only overwhelming force and success on the battlefield can make Putin retreat and consider negotiations



UKR CHOD, Gen. Zaluzhnyi, and UKR Air Chief, Lt Gen Oleshchuk, at a firing range, overseeing AF live fire exercises on the eve of the Russian invasion.

about the terms of the de-occupation of Ukrainian territories and the size of reparations. And these are the only negotiation terms acceptable here because any other ‘Minsk compromise’ will be used by Kremlin for the preparation of the next war, as we saw it after Khasavyurt or the two Minsk accords. The vital interests of both parties are in danger: the survival of the Ukrainian nation versus the survival of Putin’s regime, which Putin himself associates with the state and nation. That is why any long-term compromise is impossible and only serves as a short respite to regain strength. Only victory will end this war, and there should be no doubt that the victory will be ours.

Myth 6. *The Russian army turned out to be a ‘paper tiger’. Ukraine does not need substantial military support to fight against the ‘hollow force’ of the Russian army.*

Underestimation of the enemy is the first step to military catastrophe; this is the mistake that Russians made during the invasion of Ukraine and which we should not repeat. The miscalculations in strategic assumptions (specifically the expected level of resistance of the Ukrainian Armed Forces and the Ukrainian people) resulted in inadequate strategic planning,

inappropriate force composition and orders of battle, and unattainable combat tasks for the troops. Consequently, the most combat-worthy units and formations of the Russian Armed Forces were crushed near Kyiv, Chernihiv, Sumy, and Kharkov, and the Kremlin had to reduce its appetite and focus on the South and East of Ukraine.

Though we witnessed a relative equilibrium on the battlefield when winter came, the Russian army had remained a powerful force with huge weapon resources and manpower. Its troops prevailed in terms of firepower, combat aviation, tanks, artillery, and other systems. Their weapons and military equipment are generally up-to-date and meet world standards.



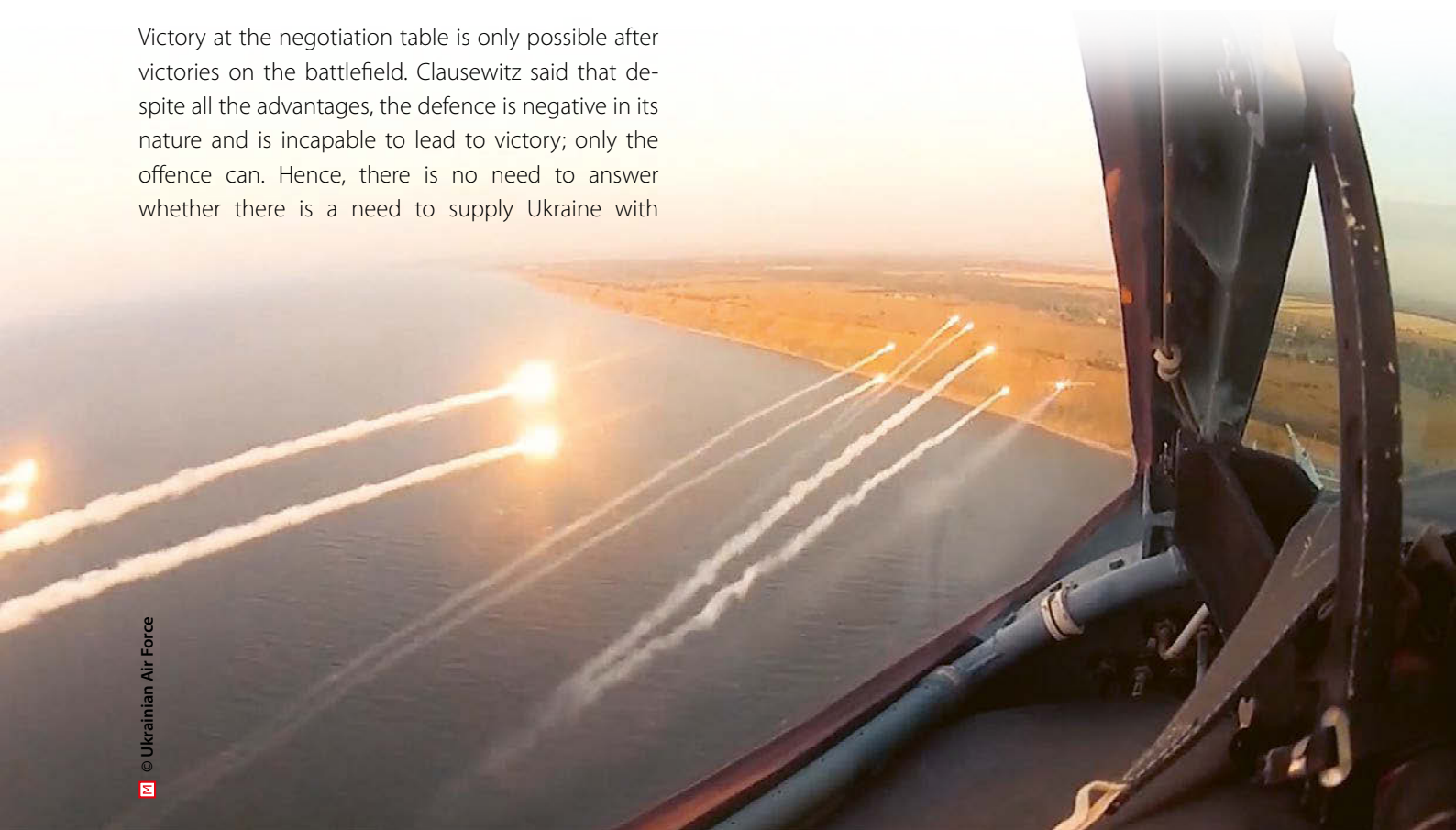
Despite all the losses, Russian Aerospace Forces keep the same groupings along our borders as they had been before the invasion, drawing reserves from Siberia and the Far East to compensate for the losses. Their pilots maintain a high level of training and substantial combat experience. The only change observed after 24 February was a demotivation of the enemy's personnel, which was caused by incompetent leadership and their increased awareness of the absurd nature of this war. Sincerely, not only the will to resist and fight of the Ukrainian people but also the degradation of the military leadership within the Russian army have kept us on the surface during the first weeks of the war and allowed us to reach military parity. However, we need much more to tilt the scales to our benefit in order to knock out the enemy's aviation from our sky and cast out its infantry from our land.

Myth 7. Ukraine does not need offensive weapons, specifically combat aviation, to fight against the aggressor. The only thing needed to survive the war is to strengthen its defence.

Victory at the negotiation table is only possible after victories on the battlefield. Clausewitz said that despite all the advantages, the defence is negative in its nature and is incapable to lead to victory; only the offence can. Hence, there is no need to answer whether there is a need to supply Ukraine with

offensive weapons or speculate on the limitation of these supplies. The question that should be answered is the following: What is the aim of the West in supplying any weapons to Ukraine? If the West does it to protect the core values of democracy, liberalism, and the current world order, is it really interested in the victory of Ukraine in its fight against the dark forces of totalitarianism and autocracy? If the answer is 'yes', then Ukraine must receive all weapon systems required for victory in this war, including combat aviation. If the answer is 'no', then the supplies of any weapons have no sense at all.

We are thankful to our partners for their decision to provide up-to-date anti-aircraft missile systems to strengthen our air defence. These systems are already protecting our women and children from Kremlin's missile attacks. However, the best air defence is burning enemy airfields in occupied Crimea, Melitopol, or Chornobaivka and having our aircraft patrolling our skies.



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Myth 8. The Russian-Ukrainian war marks the decline of Air Power as Russia and other opponents heavily invested in and developed a systematic approach to 'fracture' the Air-Land Battle by employing layers of A2/AD systems. The efforts of the Western coalition should primarily be focused on strengthening the Land Power.

This war has underlined the importance of Air Power in a contemporary conflict as never before. The inability of the Russian Air and Space Forces to utilize its potential, achieve air superiority, and provide support to ground troops has led to a deceleration and subsequently a complete paralysis of the ground offensive. The situation is the opposite for the Ukrainian Air Force as insufficient air capabilities do not allow for conducting deep counteroffensive operations. The parity in the air has contributed to parity on the ground. This war already has the name 'the artillery war', but this is a consequence rather than a conscious choice. A century of technological progress and development of military science was crossed out by one party as a result of the degradation of their military leadership, while by another party as result of the absence of required offensive air capabilities. We find ourselves again at the battle of Somme, digging into the solid Ukrainian land.

The concepts of Air Power, Air-Land Battle, and Multi-Domain Operations are actual as never before. Air-space is an unalienable domain of modern warfare, and the first to gain superiority will get the keys to victory. Though the wide proliferation of A2/AD systems on the battlefield significantly complicates air operations, it does not deny them if adequate planning occurs. Our aviation is purposefully and successfully hunting Russian anti-aircraft systems, and we can assure all that they burn after the HARM strikes, as well as Russian tanks under the hits of Javelins.

Unfortunately, our limited resources do not yet allow us to timely and completely use the results of this hunting, build up our efforts, gain the initiative, and ensure the support of our ground troops. We already see how HIMARS systems have changed the character of this war. We can also see how high-precision hits interrupt the logistics routes of the enemy and put its formations in danger. However, though the enemy's logistics are affected, it still works because even a brigade of HIMARS cannot reach the same effect as one aviation squadron by thoroughly isolating a vast area of combat operations. For this, we need up-to-date multi-functional aviation platforms.

Myth 9. The Ukrainian military is incapable of mastering modern western weapon systems, especially those as complicated as combat aviation, for effective use in the war. The military and technical aid should focus on weapons of Soviet production.

A small red army will never beat a big red army. Reliance only on the Soviet-production weapons will never allow us to reach a quantitative or qualitative parity with the enemy, saying nothing about gaining an advantage. Our power is in asymmetry, a better level of training, motivation, and the will to fight of our soldiers. Our advantage is also in the quality of our weapons, without which our soldiers are doomed to demonstrate endless heroism. During the first weeks of the war, our pilots – ghosts of Kyiv, Zhitomir, Sumy, Chernihiv, Kharkov, Odessa, Vinnitsa, and from all over Ukraine – entered the air battles flying outdated aircraft against the qualitatively and quantitatively superior enemy, sometimes only three aircraft against

eight or five against eighteen. They embraced the fight and heroically gained victories, often with the cost of their lives. However, we would like not to witness this heroism because every case of this type of heroism is the result of hopelessness and despair. As General Patton brilliantly said that 'no bastard ever won a war by dying for his country', we also do not want our pilots, air defenders, and other brothers in arms to die for Ukraine. We do want them to make the scums in the Russian ranks run away from our land, and if they refuse – die for Putin and his absurd ideas. That is why we need up-to-date weapons – the weapons that foster the philosophy of professionalism and the values of human life versus the weapons of Soviet production that profess the philosophy of the mass army of 'workers and peasants'.

We can win only by countering quantity with quality. The arguments regarding the terms for retraining are also senseless. Ukraine is a nation of educated and motivated people. Our warriors have already proven many times that we are strongly motivated to learn fast and use any weapon on the battlefield with unseen efficiency. We were told that our pilots would need no less than six months for retraining. We can assure the experts that they will need not more than three months. But even if it had been six months, and if the decision to provide us multifunctional fighters had been made at the beginning of the war, today they would be in the battle and significantly changing the course of the war. Unfortunately, the delivery procrastination only pushes back the day of our victory and increases its cost. For a year already, our pilots fly outdated aircraft, fight in the minority against the enemy, and, despite all, are able to gain victories. The ghosts of the Ukrainian sky need a chance not only to survive in fights but also to throw away Putin's hordes both from our sky and land.

Conclusion

The Ukrainian nation has been fighting for a year for survival, the right to be free, and the right to choose its future. At the same time, we fight for the values and existence of a democratic world, free from tyranny and autocracy.

This war will determine not only the fate of the Ukrainian nation or the nations of Russia but also the fate of the rule-based world order. The tyrants and autocrats of the whole world are guessing now whether their time has come. The battlefields of Ukraine will show whether Putin will become Fukuyama's 'last man' or the prophet of Huntington's 'clash of civilizations', the person who has ruined the liberal world and caused the decline of the West. The West has already received the declaration of war, and this fact should be admitted as quickly as possible because this war was declared by a daring, insidious, dangerous, and powerful enemy that collects allies under its banners.

'This war has underlined the importance of Air Power in a contemporary conflict as never before. The inability of the Russian Air and Space Forces to utilize its potential, achieve air superiority, and provide support to ground troops has led to a deceleration and subsequently a complete paralysis of the ground offensive.'

Ukraine and the West are still far from the victory and the culmination point in the conflict. Putin's army still preserves its formidable power. Russian economic and military resources are significant, and the Russian besotted society widely supports Kremlin's actions. But we can and have to win. Win by quality over quantity. Despite all efforts, the Russian army still remains a mass army of workers and peasants of the Soviet type. Even its saturation with modern technological platforms did not change its nature. High-technology and costly weapons are thoughtlessly used for terror against the civilian population. Modern high-precision missiles are aimed at apartment houses, shopping malls, civil trains, granaries, public transportation, schools, and hospitals. The enemy has chosen scorched earth tactics, shelling and destroying our cities. The Russian army is a bear that is sick with rabies,

a Goliath that lost his eyesight. It ruins everything around in blind rage but is incapable of transforming its power into real achievements on the battlefield. That is why we can and should win.

But the exhaustion strategy is ineffective. The hope that in the war of artillery the rabies will kill the bear before he completely ruins Ukraine is in vain. According to our calculations, Russia can continue this war with the current intensity for at least the next two-three years. Unfortunately, there will be nothing to protect by that time because Ukraine will have turned into ruins. The character of this war should be radically changed. To achieve this, we need to ensure the return of the third dimension onto the battlefield – the power of the Air Force. We need ‘the long hand of aviation’ for air interdiction, strategic strikes, and support of ground troops. Without this, our ground operations are doomed to stagnation and protracted artillery fights at the defence lines as it was during the First

World War. Unfortunately, in this way, we will not be able to gain either advantage or even parity with the enemy because he has overwhelming quantitative prevalence. That is why Ukraine needs an increase in its Air Power, in quantity and, more importantly, in quality.

We do not need parity in numbers, but we do need the advantage in quality. The Ukrainian pilots have already proved their mastery, professionalism, motivation, and ability to carry out extremely hard tasks and achieve success. Russian propaganda announced at least three times the ‘complete destruction’ of our aviation and air defence. But none of the Russian aircraft dares to fly over the frontline for many months, while the ghosts of Ukraine cause hard losses to the Russian army daily. We have already rejected from our skies the enemy that had almost a ten-fold advantage in quantity and quality. We are waiting for a chance to completely pin him down on the ground and show the way out to his infantry. ●

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is a graduate of the Zhytomyr Higher School of Air Defence Electronics (1994). He also graduated from the Kharkiv Military University in 2004 (staff college) and the National Defence University of Ukraine (war college) in 2010. Holds a professional bachelor's degree and two master's degrees. Started his career as a crew chief in an AD battery and proceeded to the GBAD brigade commander. He also served at various staff positions, including the Deputy Chief of Staff of the Air Force Command and the Chief of Staff – Deputy Commander of the Eastern Air Force Command. Since 9 August 2021, he is the appointed Ukrainian Air Force Commander.

Lieutenant General Viacheslav Shamko

is a graduate of the Dnipropetrovsk Higher Air Defence Command School (1984). He also graduated from the Kharkiv Military University in 1999 (staff college) and the National Defense University of Ukraine in 2005 (war college). Holds a professional bachelor's degree and two master's degrees. Started his career as a crew chief in an AD battery and proceeded to the GBAD brigade commander. He also served at various staff positions, as well as commanded three regional Air Force commands, before he was appointed as the Chief of Staff – Deputy Commander of the Ukrainian Air Force in 2017.

Colonel Artem Antonov

is a graduate of the Kharkiv Air Force Institute (in 2003). He also graduated from the Baltic Defence College in 2017 (staff course), Latvian National Defence Academy (master's program) and the US Army War College in 2022 (war college). Holds a professional bachelor's degree and two master's degrees. He also holds Candidate of Science degree and Senior Researcher rank. Since 2018 he heads the Military R&D Section in Air Force Command HQ and responsible for coordinating of such an activity within the Ukrainian Air Force.