

Is Minnesota ready for the age of drone warfare?



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Imagine a quiet cabin in the woods.

Wind rustles through early summer leaves. Birds call from tall branches while squirrels dash beneath the understory.

Suddenly, the roof of the cabin flings open. With an electric hum, drones armed

with munitions burst upward like wasps from a fallen hive.

This nimble fleet of quadcopters swarms toward an air base a few miles away, exploding sophisticated military aircraft on the ground like dandelion fluff. Similar attacks launch across thousands of miles of countryside. Each time, inexpensive drones accomplish what expensive planes and missiles could not: delivering a critical blow to a military superpower.

Perhaps this sounds like a modern-day spy novel set in northern Minnesota, but I'm describing Operation Spiderweb, which Ukraine launched against Russia on June 1, 2025.

Eighteen months earlier, Ukraine's Security Service sneaked these armed drones into Russia. Drivers thought they were delivering manufactured cabins to remote locations. Ukraine claimed the attack destroyed \$7 billion in Russian military targets, mostly aircraft. The first of its kind, this operation reordered the Russo-Ukrainian war.

Today, Russia's monthly war losses in personnel and equipment — mostly due to Ukraine's superior drone tactics — exceed its ability to replace them. It's a plucky underdog story that also signifies a potentially terrifying new world order. These drones narrow the odds in any conflict between a large power and a smaller one.

"The No. 1 change is the proliferation of precision strike capabilities, the ability to use

small, guided munitions to directly hit targets," said Ryan Brobst, deputy director of the Center on Military and Political Power in Washington, D.C.

If these sneak attacks can happen in the forests of Russia, even as far away as Siberia, we should note our similar geography here in Minnesota.

Last year, I asked representatives of the 148th Fighter Wing of the Air National Guard in Duluth what prevented such an attack in rural parts of our state.

The base declined to comment, and I must admit that it would be hard to answer the question without scaring people. But Brobst, who specializes in military drone research, says we must prepare for this immense shift in how wars will be conducted.

"The threat to individual Americans from these drones

is quite low," said Brobst.

"But it is important that the U.S. military has the ability to invest in defense against them to protect the lives of U.S. service members as well as advance American interests in the event of a conflict."

In December 2021, shortly before Russia's invasion of Ukraine, Brobst published an article about the ways that small loitering munitions, or kamikaze drones, were going to change warfare. Since then, he's watched Ukraine prove his point faster than he thought possible.

"War rapidly drives the pace of innovation out of necessity," said Brobst.

Ukraine overcame Russia's initial advantage in drone technology by wisely choosing to funnel foreign aid toward coordinated drone systems and aggressive tactics.

For the price of a \$1,000 drone with a bomb, Ukraine can take out individual soldiers, valuable equipment or crucial surveillance technology. Drones wage a flexible war of attrition, like mosquitoes that can kill a bear with time and persistence.

Former CIA Director David Petraeus said that drones have "frozen the battlefield," in Ukraine, making it difficult to move large groups of soldiers or equipment. Armored vehicles are basically useless

he said. The U.S., he told CBS News, needs "a whole new concept of warfare."

This is not a theoretical claim. By traditional measures, the current conflict in Iran was an American and Israeli rout. And yet, mostly due to the success of Iranian drones, the U.S. and Israel took expensive losses while failing to completely snuff out Iran's defensive capabilities. That's how the so-called losing side somehow ended up closing the Strait of Hormuz and driving up global oil prices.

"The war with Iran also exposed, I think, capability gaps in our ability to defend against drones," said Brobst. "Collaboration with Ukraine is probably the best way to fix this, given they have the most experience in the world of any friendly country defending against this threat."

Notably, Ukraine signed security agreements with Persian Gulf nations facing air attacks from Iran, including the United Arab Emirates, Qatar and Saudi Arabia.

It's offered the same to any nation helping it fight for survival against Russia, the U.S. included.

Minnesotans have a good reason to pay attention.

"The technology cuts both ways," said Brobst. "Drones make it easier for the United States to monitor our own border by acting as a force multiplier to allow remote monitoring of large areas. But they also pose a challenge because adversaries could potentially use them to conduct attacks or reconnaissance across the border."

Defending against future threats will take more than just better drones, said Brobst.

"The first layer [of defense] is our intelligence capabilities, which is identifying such threats before they're actually in place."

Brobst said the second layer of defense, defeating the drones in the air, is much harder.

"If the adversary can employ them at the time of their choosing, it's difficult to defend against," he said. "The United States is a continent-sized country with numerous military installations. It's difficult enough to defend even small areas from these types of threats."

That only underscores the importance of our diplomatic ties to neighboring Canada, a key ally that the Trump administration has treated with needless contempt.

"Two things that stand out to me [are] maintaining a good relationship with Canada and working with Ukraine to improve both of our capabilities," said Brobst.

According to Brobst, these are obvious ways to keep drone warfare out of Minnesota.

I might add that the best kind of drone war is no war at all. This might be the only way to truly avoid turning our nation, or even the whole world, into a dark forest of collateral damage.

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