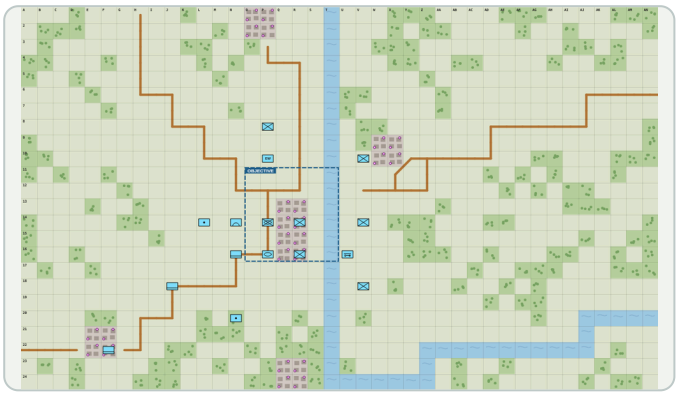
STUDENT HANDOUT

The Sudzha Road

Sudzha, Kursk Oblast, Russia · August 2024 to March 2025



Scenario illustration · AI generated



Student map · own side only · Simulation situation map · reconstructed terrain and estimated deployments; not verified historical positions.

Learning objectives

- Compare the Kyiv Independent's attributed account of logistics under drone pressure with loss of supply units in the model; distinguish a reported road-access problem from the simulation's supply-cutoff rule.
- Compare jamming and interceptor drones as defences against enemy drones, and identify why jamming fails against fibre optic drones.
- Assess the model's cold-weather reductions in small-drone flight time and increase in thermal visibility, and explain why these fixed parameters are teaching assumptions rather than measured effects for every historical flight.

Run time and a good result

Default run clock: 2 minutes 40 seconds at 1×, excluding pauses, briefing and discussion. Time controls change elapsed play time.

Objective: Keep supplies moving up the road from Yunakivka and hold Sudzha until time runs out.

The Sudzha Road: Keep supplies moving up the road from Yunakivka and hold Sudzha until time runs out. Prevent an unopposed enemy occupation of the marked zone lasting 8 continuous simulation seconds; retain a fighting force until the episode ends. The authored limit is 160 simulation seconds across 1 stage. Compare objective progress, time, losses, drone expenditure and recorded civilian harm with a second run. A strong classroom result also explains the source evidence and reconstruction estimates; it does not verify a historical casualty count.

Atrocity notice

The UN Commission found war crimes by Russian authorities, including killings, torture and sexual violence, and a small number of violations by Ukrainian forces. Its March 2023 findings are context, including for later scenarios.

These reports describe the wider conflict. They do not establish that every crime occurred in this modeled battle.

Studying or commanding a side does not endorse its conduct. Drone Front never lets players target civilians, hospitals, schools or places of worship. Civilian harm from simulated strikes is counted and shown in the debrief, including nonzero harm. Civilian massacres are never playable operations. Designated terrorist forces and Wagner remain computer controlled; Gaza war events remain excluded from play.

▼ Dated reports and findings

- 2023-03-16 · UN Commission of Inquiry: war crimes in Ukraine

Learn more: the laws of war

- ICRC: Geneva Conventions and commentaries
- ICRC: Customary IHL database
- UN: Genocide Convention (9 December 1948)
- UN: Rome Statute (17 July 1998), articles 6–8

Historical source notes

Francis Farrell's 20 May 2025 Kyiv Independent report describes serious logistics difficulties in Kursk and quotes a Ukrainian medic whose unit's supplies collapsed. It reports earlier Russian deployment at scale and later Ukrainian adoption of fibre-optic drones. A physical control link resists radio-link jamming; that does not mean every route was continuously observed or every drone invulnerable.

The Kyiv Independent interpreted maps published by Ukraine's General Staff on 16 March 2025 as confirmation of withdrawal from Sudzha, separately noting Russia's capture claim of 13 March. These dated statements are attributed to the parties; they do not independently establish the later status of the entire Kursk region.

Russia's human rights ombudsman said in October 2024 that about 112,000 Kursk residents had been evacuated, and South Korea's intelligence service estimated in January 2025 that about 300 North Korean soldiers had been killed and 2,700 wounded.

Evidence for learning objectives

Farrell's May 2025 medic interview describes disrupted logistics and routes watched by fibre-optic drones. The experience remains attributed rather than a complete campaign reconstruction.

Farrell describes Russian initial deployment of fibre-optic FPVs in Kursk and later Ukrainian adoption. Cable control bypasses radio-link interference, while physical link failure remains possible.

The March 2025 investigation translated by Meduza attributes at least 112,000 displaced civilians to official Russian data. This audit does not verify the old October/ombudsman attribution.

Timings

For 60 minutes, brief for 10, run once in cold with three pauses for 25 and review for 25; for 90 minutes, disable your side's drones in a comparison run and compare supply cutoff; for 180 minutes, compare fog and strict rules of engagement, reporting time held, supply-unit losses and civilian harm separately from equipment costs.

Session	Plan
45 minutes	Brief: 10 min; Run: 15 min; Collect: 5 min; Review: 15 min

Session	Plan
60 minutes	Before questions: 5 min; Brief: 10 min; Run: 20 min; Collect: 5 min; Debrief and after questions: 15 min; Discussion: 5 min
90 minutes	Before questions: 5 min; Brief: 10 min; Run 1: with drones: 20 min; Run 2: without drones: 15 min; Collect: 5 min; Compare and discuss: 25 min; After questions: 10 min
180 minutes	Before questions: 10 min; Brief and staff roles: 15 min; Run 1: with drones: 25 min; Run 2: without drones: 20 min; Break: 10 min; Run 3: syndicates: 30 min; Collect: 10 min; Seminar replay and debrief: 40 min; After questions: 10 min; Close: 10 min

Staff roles

commander
Choose the posture in the briefing and the rules of engagement and target priority during the run, and report whether Sudzha can be held until time runs out if supplies are cut.

intelligence
Track enemy recon flights and fibre optic attacks along the road, and report which supply units and positions the enemy has probably found.

fires
Report what your two batteries engage, how many shells remain, any Lancet attack on them and any strike near civilians in Sudzha.

droneOps
Split the interceptors, quadcopters, FPVs, bomber drones and the Shark between protecting the road and hitting the attackers, and report how much the cold is cutting flight time.

Opposing staff objective

Retake Sudzha before time runs out, attacking from Malaya Loknya in the north, Martynovka and the Kursk road in the east and the Psel valley in the south east, while your drones cut the road from Yunakivka.

Decision points

- Before the first launch: your three supply units sit along the highway from Yunakivka into Sudzha, so which drones will you spend on the enemy recon drones that find targets on that road, and which on the attacking infantry?
- When the first fibre optic drones start hitting vehicles on the road: your jamming cannot stop them, so do you change target priority, send interceptors after the enemy recon drones, or accept the losses and keep striking the attackers?
- When enemy infantry reach the edge of Sudzha: what do your rules of engagement allow you to strike among the civilians who live there, and how will you hold the town under them?

Before and after questions

1. **What supply difficulty did the medic interviewed by Farrell report from the Sudzha fighting?**

   A. The main problem was maintaining shelter rather than supplies
   B. Farrell's medic described deteriorating logistics along supply routes monitored by fibre-optic drones
   C. The main problem was limited communication between forward positions
   D. The main problem was seasonal river conditions affecting transport

2. **What distinguishes fibre-optic control from the radio link of an ordinary FPV drone?**

   A. A physical cable carries the control connection
   B. An onboard relay repeats ordinary radio control signals
   C. A preset route replaces continuous operator steering inputs
   D. An onboard camera supplies control without an operator

3. **What displacement figure did the March 2025 investigation published in Meduza attribute to official Russian data?**

   A. Large numbers had reportedly returned to occupied Sudzha
   B. Evacuations remained limited to a few villages
   C. Residents were being relocated to Sumy Oblast
   D. At least 112,000 civilians had reportedly been displaced

4. **According to Farrell's May 2025 reporting, which side introduced fibre-optic FPVs first in this fighting?**

   A. Ukraine first, with Russia adopting them later
   B. Russia first, with Ukraine expanding use later
   C. Russia and Ukraine expanded simultaneously using similar initial stocks
   D. Ukraine introduced them while Russia retained radio-controlled designs only

5. **How did the fighting for Sudzha end in March 2025?**

   A. A negotiated local agreement preserved Ukrainian control
   B. A reported Russian capture lacked subsequent Ukrainian confirmation
   C. A Ukrainian withdrawal was subsequently officially confirmed
   D. A Ukrainian redeployment preserved control of central Sudzha

Discussion

- Were all three modeled supply units destroyed, triggering supply cutoff? If so, when did it occur, and what changed in artillery resupply, vehicle speed and drone turnaround time? Explain how this rule differs from actual road access.
- Compare runs with your side’s drones enabled and disabled, leaving enemy drones unchanged. Compare supply-unit survival, time held and losses, and identify which real road-access problems the model does not represent.

- Civilians live in Sudzha, the town you are holding. How did your rules of engagement shape its defence once enemy infantry reached it, and what civilian harm does the after action review record?
- Farrell's May 2025 reporting describes earlier Russian deployment at scale and Ukrainian teams adopting fibre optic drones. Which testimony supports that account, which limits remain, and how does the modeled inventory simplify that dated comparison?

Debrief rubric

Strong
Meets the objective or explains why it was not met; uses the published sources and run evidence, separates known facts from assumptions, compares both sides' losses and cost exchange, and evaluates precautions against civilian harm.

Adequate
Describes the objective and main decisions, identifies at least one source and model limitation, reports losses and harm, and gives a reasoned change for a second run.

Weak
Reports only victory or points, treats teaching settings as real performance, gives unsupported historical claims, or omits uncertainty and civilian harm.

Published readings

1. Kyiv Independent: As Russia's fiber optic drones flood the battlefield, Ukraine is racing to catch up
2. ISW (via Critical Threats): Russian Offensive Campaign Assessment, 12 March 2025
3. Kyiv Independent: Ukraine confirms withdrawal from Sudzha in Russia's Kursk Oblast

Complete source list

Kyiv Independent: As Russia's fiber optic drones flood the battlefield, Ukraine is racing to catch up
ISW (via Critical Threats): Russian Offensive Campaign Assessment, 12 March 2025
Kyiv Independent: Ukraine confirms withdrawal from Sudzha in Russia's Kursk Oblast
Al Jazeera: Russia says it has fully retaken Kursk, but Ukraine says fighting continues
Wikipedia: Kursk campaign
Wikipedia: Sudzha
Wikipedia: Yunakivka