FACILITATOR PACK

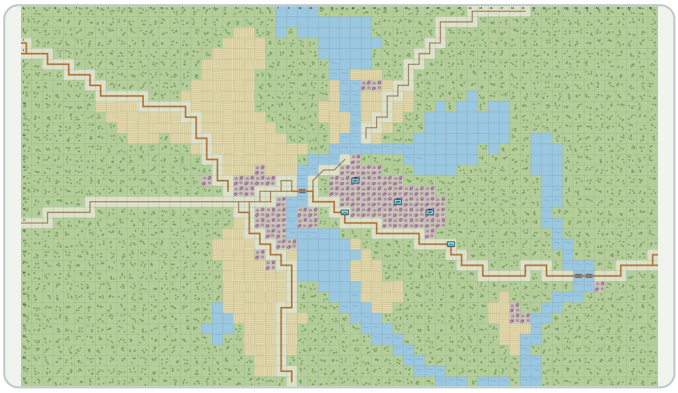
Toropets: The Arsenal Fires

Toropets, Tver Oblast, Russia · Night of 17 to 18 September 2024

Information as of October 2026



Scenario illustration · AI generated



Facilitator map · both sides · Simulation situation map · reconstructed terrain and estimated deployments; not verified historical positions.

Learning objectives

- Locate Toropets and the surrounding lakes.
- Compare the preserve and damage goals.
- Distinguish official statements from observed effects.

Run time and a good result

Default run clock: 3 minutes 0 seconds at 1×, excluding pauses, briefing and discussion. Time controls change elapsed play time.

Objective: Keep at least two of the three marked arsenal sector counters working until the episode ends. The depot suffered extensive damage historically; this is a limited preserve mission.

Toropets: The Arsenal Fires: Keep at least two of the three marked arsenal sector counters working until the episode ends. The depot suffered extensive damage historically; this is a limited preserve mission. Preserve at least 2 represented site functions until the attack ends. The authored limit is 180 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

Air defence reports and observed damage described different parts of the event.

Damage to stored supplies affected a wider war beyond the local map.

The surrounding town suffered evacuation and damage during an attack on a military facility.

Civilian harm

RFE/RL documented evacuation and footage of apartment windows shattered by the explosions. AP reported the Russian Health Ministry count of at least 13 injured people.

Evidence for learning objectives

The authored preserve goal requires at least two of three arsenal sector counters to remain working; the counters are not individual buildings.

RFE/RL reported Rudenya's interception-and-debris explanation alongside explosions, fire imagery and evacuation; those observations do not determine every impact mechanism.

AP attributed at least 13 injured people to Russia's Health Ministry; its report does not separate civilian and military status.

Timings

For 60 minutes, brief for 15, run both perspectives for 25 and discuss for 20. For 90 minutes, compare repeat runs. For 180 minutes, compare other historical depot attacks.

Session	Plan
45 minutes	Brief: 10 min; Run: 15 min; Collect: 5 min; Review: 15 min
60 minutes	Before questions: 5 min; Brief: 10 min; Run: 20 min; Collect: 5 min; Debrief and after questions: 15 min; Discussion: 5 min

Session	Plan
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
Track the limited preserve objective.

intelligence
Compare claims and observed effects.

fires
Record simulated effects and civilian harm.

droneOps
Compare the historical drone role with its abstract representation.

Opposing staff objective

Disable at least two of the three marked arsenal sector counters. This damage goal represents the extensive fires reported after the Ukrainian attack.

Decision points

- Opening: which marked counters represent military storage?
- During the run: how do simulated losses change the preserve goal?
- After the run: how does the result compare with the published damage?

Before and after questions

1. **What meets the Russian preserve goal at the end of the Toropets episode?**

   A. At least two of the three marked arsenal counters still work.
   B. All three arsenal counters escape any simulated damage.
   C. At least two attacking drones are recorded as intercepted.
   D. One arsenal counter remains alongside both defence groups.

   > **Answer A:** The model's protect objective sets n=2 for site counters. The briefing specifies at least two of three sectors working at episode end, rather than an interception count.

2. **How should Rudenya's explanation and RFE/RL's Toropets imagery be compared?**

   A. The official statement establishes that the arsenal was unharmed.
   B. Reported effects show damage without settling every impact cause.
   C. The imagery verifies that every incoming drone reached the depot.
   D. The evacuation establishes the exact number of failed intercepts.

> **Answer B:** RFE/RL reported Rudenya's debris explanation and also fire, explosions, damaged windows and evacuation. Effects are observable; the cause of each impact remains a separate question.

3. **How should AP's report of at least 13 injured people at Toropets be used?**

   A. As a verified total of civilians injured in the incident.
   B. As a verified total of military personnel injured there.
   C. At least thirteen reported injuries without a military or civilian status breakdown from the Health Ministry
   D. As the number of residents evacuated from damaged homes.

> **Answer C:** AP cites the Health Ministry for at least 13 injured people but gives no civilian/military breakdown. Evacuation and damaged homes are separate consequences.

4. **What do Toropets's three arsenal sector counters represent?**

   A. Three individually identified buildings with verified damage.
   B. Three measured ammunition inventories from the historical depot.
   C. Three documented explosions in their exact historical sequence.
   D. Three abstract sectors summarising the reported arsenal damage.

> **Answer D:** The accuracy notes call the counters a summary of reported damage, not individual buildings or an exact depot layout. The two-counter threshold is authored.

5. **What does the Liutyi card establish about the historical Toropets attack?**

   A. It supplies a proxy; exact Liutyi use here remains assumed.
   B. It verifies the aircraft model used by every incoming drone.
   C. It establishes the historical total of attacking flights.
   D. It identifies the air-defence weapons used in the incident.

> **Answer A:** The briefing uses Liutyi for an unspecified Ukrainian attack drone and marks its exact local use and compressed flight count as assumptions.

Discussion

- Why are three counters a simplification of a large arsenal?

- What do satellite images establish about damage?
- How were residents affected by the explosions?

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.

Facilitator notes

Assess historical source analysis through the cited readings, answers and discussion. Run metrics describe the simulated run; they do not verify historical claims or demonstrate that a source-analysis objective has been met.

Published readings

1. Reuters, Lucy Papachristou and Lidia Kelly: Ukrainian drone attack triggers blast at arsenal in Tver, 18 September 2024
2. RFE/RL: Drone attack targets arms depot in Russia, 18 September 2024
3. Euronews, Sasha Vakulina and AP: What was stored at the Russian arms depot in Tver, 18 September 2024

Complete source list

Wikipedia: Toropets depot explosions, accessed 5 October 2026
Reuters, Lucy Papachristou and Lidia Kelly: Ukrainian drone attack triggers blast at arsenal in Tver, 18 September 2024
RFE/RL: Drone attack targets arms depot in Russia, 18 September 2024
Euronews, Sasha Vakulina and AP: What was stored at the Russian arms depot in Tver, 18 September 2024
ERR: EDF colonel on Russian naval exercise and Toropets attack, 20 September 2024
Associated Press, Hanna Arhirova: Ukrainian drones strike a major military depot, 18 September 2024