STUDENT HANDOUT

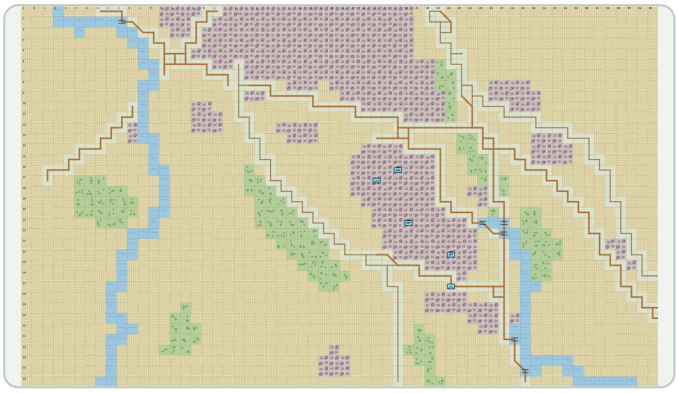
Ryazan: The January Refinery Strike

Southern Ryazan, Ryazan Oblast, Russia · Night of 23 to 24 January 2025

Information as of October 2026



Scenario illustration · AI generated



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

Learning objectives

- Locate the refinery in southern Ryazan.
- Compare preserve and damage goals.
- Distinguish confirmed effects from attributed claims.

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 refinery sector counters working until the episode ends. The refinery was damaged historically; this is a limited preserve mission.

Ryazan: The January Refinery Strike: Keep at least two of the three marked refinery sector counters working until the episode ends. The refinery was damaged 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

Industrial damage can interrupt activity without destroying a whole facility.
Claims of interception and reports of damage require separate assessment.
The facility served civilian and military fuel users.

Civilian harm

Reuters industry sources reported fires and damaged refinery equipment. Ukrainska Pravda attributed the facility civilian and military supply role to Andrii Kovalenko.

Evidence for learning objectives

Russia must retain two aggregate site functions at the end of 180 seconds; these are not individual storage tanks.
Reuters industry sources described a processing halt after equipment damage; this does not establish total destruction.
The packet records industrial damage but no separate civilian casualty total for this refinery episode.

Timings

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

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
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

Session	Plan
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 goal.

intelligence
Compare attributed reports.

fires
Record simulated effects and civilian context.

droneOps
Compare the reported drone role with its proxy.

Opposing staff objective

Disable at least two of the three marked refinery sector counters. This represents documented industrial damage, not the destruction of the whole city.

Decision points

- Opening: where are the industrial area and nearby settlements?
- During the run: how many aggregate site functions remain?
- After the run: what does the historical reporting establish?

Before and after questions

1. **What interpretation fits Reuters' 27 January report on Ryazan's shutdown?**
   A. Fire reports establish permanent closure of the refinery.
   B. The halt establishes destruction of every plant function.
   C. The halt establishes loss of fuel supply across all Russia.
   D. Industry sources described equipment damage that stopped processing or dispatch without establishing permanent refinery closure

2. **What must remain for Russia’s stated Ryazan preserve goal to be met?**

   A. Two aggregate site functions remain at the episode end.
   B. Two individual storage tanks remain at the episode end.
   C. Two intercepted drones are recorded at the episode end.
   D. Two days of normal output follow the modelled episode.

3. **How should Liutyi and fourteen opportunities be interpreted in Ryazan?**

   A. An identified aircraft model and verified local drone total.
   B. An assumed proxy and abstract regional flight opportunities.
   C. A photographed local fleet and verified number of impacts.
   D. An identified aircraft model and count of national losses.

4. **How should the absent Ryazan civilian casualty figures be interpreted?**

   A. The selected record confirms that no civilians were harmed.
   B. Casualties elsewhere provide this episode’s missing total.
   C. The selected record establishes no separate casualty total.
   D. Damaged site counters provide this episode’s injury total.

5. **How should the claim about Ryazan’s civilian and military fuel role be presented?**

   A. A plant-wide finding independently established by imagery.
   B. A supply finding established by the model’s site counters.
   C. A refinery supply finding attributed to Russia’s ministry.
   D. Kovalenko’s account as attributed by Ukrainska Pravda.

Discussion

- What is the difference between damage and total destruction?
- Why does an industrial site have military and civilian significance?
- Which details remain assumptions in this representation?

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. Reuters: Ukrainian drones hit big Russian oil refinery at Ryazan, 24 January 2025
2. Ukrainska Pravda, Iryna Balachuk: Drones hit oil refinery in Ryazan and military plant in Bryansk, 24 January 2025
3. Ukrainska Pravda, Valentyna Romanenko: Ukrainian UAVs hit one of Russia largest oil refineries, 24 January 2025

Complete source list

Wikipedia: Ryazan refinery, war history section, accessed 5 October 2026
Reuters: Ukrainian drones hit big Russian oil refinery at Ryazan, 24 January 2025
Ukrainska Pravda, Iryna Balachuk: Drones hit oil refinery in Ryazan and military plant in Bryansk, 24 January 2025
Ukrainska Pravda, Valentyna Romanenko: Ukrainian UAVs hit one of Russia largest oil refineries, 24 January 2025
Kyiv Independent, Martin Fornusek: Massive drone strike targets Russian refinery and plants, 24 January 2025
Reuters via Global Banking and Finance Review: Ryazan refinery halts operations after drone strikes, 27 January 2025