

INT. HELICOPTER

BORIS SHCHERBINA, the high-ranking vice-chairman of the Council of Ministers of Russia, sits in a comfortable seat with a personal table in a Russian helicopter. Across from him, in the seats meant for those less important, sits VALERY LEGASOV, an inorganic chemist and a member of the Academy of Sciences of the USSR, who has been appointed as the chief of the commission investigating the Chernobyl disaster.

Legasov is flanked by a soldier on each side of him. A pilot flies the helicopter within earshot of the other men.

They sit quietly as the helicopter flies, Legasov looks incredibly worried.

BORIS
How does a nuclear reactor work?

VALERY
What?

BORIS
It's a simple question.

VALERY
It's hardly a simple answer.

BORIS
Of course. You presume I'm too stupid to understand. So I'll restate. Tell me how a nuclear reactor works or I'll have one of these Soviets throw you out of the helicopter.

Legasov looks at the soldiers on each side of him and ponders his options. He concedes.

VALERY
A nuclear reactor makes electricity with steam. The steam turns a turbine which generates electricity. Where a typical power plant makes steam by burning coal, a nuclear plant...

Valery reaches for a non-existent pen in his suit jacket. Boris pulls a pen from his pocket and gives something to Valery to write on as well.

VALERY (CONT'D)
... in a nuclear plant we use something called fission.
(MORE)

VALERY (CONT'D)

We take an unstable element like Uranium-235 which has too many neutrons. A neutron is, uh--

Valery had mentioned in a meeting with Gorbachev that, in layman's terms, the neutrons in Uranium are like bullets which will keep firing for 25,000 years.

BORIS

-- the bullet.

Valery looks at Boris... he HAD been listening.

VALERY

Yes, the bullet. So, bullets are flying off the uranium. Now... if we put enough uranium atoms close together, the bullets from one atom will eventually strike another atom. The force of this impact splits that atom apart releasing a tremendous amount of energy. Fission.

BORIS

And the graphite?

VALERY

Ah, yes. The neutrons are actually traveling so fast, we call this flux, it's relatively unlikely the uranium atoms will ever hit one another. In RBMK reactors we surround the fuel rods with graphite to moderate, slow down, the neutron flux.

BORIS

Good.

Boris takes back his pen and moves what Valery has drawn away from Valery.

BORIS (CONT'D)

I know how a nuclear reactor works. Now I don't need you.

Valery looks on at Boris in quiet shock. The helicopter falls silent. After some time, the PILOT speaks up.

PILOT

We're approaching the power plant.

Valery turns to look out the window behind him.

VALERY
My God... what have they done?

BORIS
Can you see inside?

VALERY
I don't have to.

Valery shifts from looking out the window behind him to looking out through the pilot's view so Boris can see what he is seeing as he explains it.

VALERY (CONT'D)
Look, that's graphite on the roof.
The whole building's been blown
open, the reactor is exposed.

BORIS
I can't see how you can tell that
from here.

Valery, exasperated at the ignorance, let's out a sigh.

VALERY
For God's sakes, look at that glow.
That's radiation ionizing the air.

BORIS
Well, if we cannot see, we do not
know.
(to pilot)
Get us directly over that building.

VALERY
(calm)
Boris, if we--

BORIS
Don't use my name!

Dialogue overlapping. Both increasing volume.

VALERY
-- fly directly over an open
reactor--

BORIS
(yelling)
I know how a reactor works!

VALERY
(yelling)
-- we'll be dead within a week!
Dead!

PILOT
Sir?

BORIS
Get us over that building! Or I'll
have you shot!

Valery takes about a second before disregarding protocol when he stands up, moves near the cockpit and speaks directly to the pilot.

VALERY
If you fly directly over that core,
I promise you by tomorrow morning
you'll be begging for that bullet.

The pilot almost immediately disregards Boris's orders. He takes a sharp right turn which throws a standing Valery onto Boris. Boris pushes Valery back toward the seat he was in. Valery sits.

Boris fumes... no eye contact with Valery.

END SCENE