Mr. President! Nuclear missiles will strike our country in 14 minutes.

I know it's your first day in office so I'm going to walk you through it, but you're the only one

who can authorize our nuclear retaliation in

response and you've only got a few minutes to make a decision!

As you know tensions have escalated rapidly in the past few days.

Today's joint allied aerial defense exercise began just minutes before we detected the launch.

A simple misunderstanding maybe.

We assume the sudden attack is meant to neutralize as many of our nuclear forces as possible.

But that doesn't matter now – missiles are in the air and we can't shoot all of 'em down.

Why? Because Intercontinental ballistic missiles are basically rockets launched into space

before re-entering the atmosphere over their target and releasing many different warheads.

Higher and faster than anything you can send after them.

We need to get you to the bunker!

Here is what we know: Four minutes ago our new infrared monitoring satellites

detected one hundred twelve bursts consistent with ICBM launches from the enemy's inner territories.

For some reason only 20 of their 80 underground nuclear silos seem to have fired, so we suspect

most of them were transporter-erector launchers, you know: trucks with big missiles on them.

It's unclear why they didn't use all their silos – they

might just not work after more than thirty years

or they might be keeping them in reserve. The fog of war is keeping many things unclear!

Aerospace Command thinks the ICBMs are targeting our nuclear command centers,

silos, and major airforce and navy bases, ending this war before we have a chance to act!

The enemy's strategic doctrine prioritizes military targets and our nuclear weapon

systems, but their secondary targets are our industry and infrastructure – oil refineries,

power stations and deep water ports. All located near or in major population centers.

We won't know the exact casualty count for a few weeks.

Deaths from the blast and burns may be a few million today.

It's morning rush hour and there's not much to be done for people stuck in traffic.

People in major metro areas can't really evacuate, but emergency broadcasts are

being sent out to shelter in place and away from windows. Radiation exposure for intact

population centers is highly dependent on the weather over the next week.

We might be looking at dozens of millions of deaths by the end of the month.

For the next few minutes we can

still respond, but –
You need to decide!

We've got 1500 warheads across our silos, bombers, and submarines.

The 400 in silos need to be launched now before they get taken out.

46 nuclear capable bombers on high alert can be ready to take off in 2 minutes –

though we need to transmit the order now to get them out of the blast radius

if you want to consider using them.

Of our 14 nuclear submarines, 5 are presently at sea.

While they're submerged they're undetectable, so that's our

back-up for a nuclear retaliation if we lose our silos and bombers.

We could try to use them to bomb out their remaining

silo fields before they can launch them.

The sooner you commit to it, the better the chance we have

of preventing a further exchange after our retaliation.

Updates!

We have radar confirmation that the enemy ICBMs

have completed their burn and deployed their warheads.

Our best guess is that each missile will deploy at least 6 re-entry vehicles,

about 600 in total, which is the part that carries a warhead back into the atmosphere

during its terminal descent onto the target– and with many more decoys on top of that,

inflatable balloons meant to waste any anti-missiles.

We're now tracking nearly 4000 potential targets.

Our anti-ballistic missiles have been launched and will begin their intercept in another minute.

We'll do our best to protect the capital, although there really is no defense.

Wait... confirming a partial radar blackout, our systems seem to be glitchy.

The enemy must have anticipated we'd launch our

interceptors and pre-detonated a few warheads at high altitude.

That ionizes the atmosphere and creates radar interference.

Our interceptors should still operate okay,

they've had a 55% success rate in tests but never with this many decoys

or with radar interference this intense.

We might shoot down 50 objects,

but there's no guarantee they're warheads.

It looks like most bombs are going to get through.

This is our last chance to counterattack.

We're out of time. Our silo launch

sequence takes 5 minutes. We have to transmit and confirm a launch order

and the missile needs time to clear the blast radius of the incoming bomb.

This is a lot to take in, but the war plan is made,

you just need to enter the launch authorization codes

and push this button to transmit them!

You can't do anything else to save more of our people.

If you don't launch now then this war will be

over before it even begins – you understand this is our one chance, right?

The effect? Enemy civilian casualties are hard to estimate, but should be similar to ours

a few million right away, perhaps a fewtens of million by the end of the month.

The total fallout from their attacks and ours might trigger a nuclear winter,

potentially killing billions around the world – but that might happen even if we don't retaliate.

I'm sure you have questions but you have

to give orders without expecting answers right now.

With an attack of this scale there's no guarantee

communications or assets will be intact in a few minutes.

We're out of time, we need a decision Sir. Can we launch?

Nuclear wars aren't regular wars. They only last minutes, and in times of crisis,

small conflicts can rapidly spiral out of control. Anything from small communication lags

to sensor errors to just uncertainty and the fog of war mean that no leader will ever have

a complete idea of what's happening as a crisis unfolds. When tensions are high, accidents or

misunderstandings can steer leaders - even those with good intentions - to launch a nuclear attack.

Confused and with incomplete information, a single person

- yes, it's really just ONEsingle person who decides -

can literally make civilization-ending decisions

killing hundreds of millions of people in the time it takes to watch a YouTube video.

This story is fiction, but the world came very close to this several times.

In 1995 Russian radar detected a submarine launched missile and their nuclear forces went

on full alert, except it was actually a scientific rocket to study auroras.

In 1979, US computers reported a full scale
Soviet attack with only minutes to respond

except it was a training tape being incorrectly loaded into a computer.

In 1983, the Soviet satellite alert system showed five ICBMs launched from the US.

But it was a false alarm caused by sunlight reflected on clouds.

During the Cuban Missile Crisis,

a Soviet submarine with no contact to

Moscow for several days concluded that

nuclear war had begun and decided to launch a nuclear torpedo.

Luckily the authorization of three officers was required.

One of them, Vasily Arkhipov, opposed it.

But what if he hadn't?

Any safeguard can fail, no matter how carefully designed it might be.

And decisions are being made right now to build new weapons and missile systems

that commit the world to another century of nuclear stalemate,

complicated further by China's emergence as a new nuclear superpower.

Simply accepting that the existence of nuclear

weapons is inevitable might mean their use is inevitable.

But the world doesn't have to be this way. Even incremental steps, taking apart one bomb at a time, will eventually result in a world with none.

During the Cold War, the world had over 70,000 nuclear weapons

through arms reduction treaties,
that number is now about 12,500.

Progress is not guaranteed, but it's also not impossible.

Governments and militaries are not separate from their nations, they're part of them,

just like you. You have the power to make demands of your leaders and often

this begins with just being aware of an issue. If you want to learn more,

we've compiled a number of resources for you in the video description and our sources.

This video was supported by Open Philanthropy.

Did you know that there are countless more kurzgesagt videos that we upload on TikTok,

Youtube Shorts and Instagram Reels? Byte-sized

information, animated facts and inspiring thought experiments.

After all, you also need videos you can watch quickly in a bathroom break!

Our longer, more in depth videos are happening here on Youtube – Short form is a completely different challenge

that we are trying to do as well as possible – check them out if you are curious!

And if you want to discuss and share your thoughts about Science with other like-minded people,

why don't you check out our Discord community with over 80,000 birbs?

We have channels where you can chat about STEM topics,

participate in events and the "academic question of the week"

... and we have the best emotes!

After all, we want to spark your curiousity,

but it's always more fun to be curious together! See you over there!