

The Great Simplification - Frankly #2

Nate Hagens (00:00):

Hello, welcome to episode two of Frankly. I actually have Frank here briefly for this one. With me today is my colleague and friend Chuck Watson. How you doing Chuck?

Chuck Watson (00:13):

Well, it's the third, Monday of the week as we like to say.

Nate Hagens (00:18):

So there's a lot going on in the world. Ukraine and Russia is the focus of the day. There's a lot of different things we could talk about, finance, geopolitics, economic, new multi-polar world. But on this episode, I just want to get your expertise and talk about one thing. There was a Pew research study that came out this morning that said that 35% of Americans would be willing to risk nuclear war with Russia to protect Ukraine. So let's just drill down on that question. First of all, how is this possible that 35% of our country, men and women are willing to do that?

Chuck Watson (01:05):

Yeah. And if you look at the details of the poll, it's incredible, because it's evenly split between Democrats and Republicans. So it's not like it's in the past where you had a militant group in one party or the other. This is shockingly even. And I think there's a couple reasons for it. And one of the biggest is I think people just don't really know or remember what even a conventional war is like, much less than nuclear war. You look at the horrific scenes we're seeing from Ukraine. Well, that's been going on for years in Donbas, even within Ukraine, much less Syria, Libya, Iraq, Afghanistan. So I think the American people have been somewhat insulated from what a war looks like much less what it sounds or smells like. And so that means that when you start to try to describe how horrific a nuclear war is relative to a conventional war, there's not that much perspective there. They look at it and go, oh my God, conventional war is so bad. How can it be worse? Well, it can be a hell of a lot worse. So that's the proof point.

Nate Hagens (02:14):

One thing I learned yesterday, I did a podcast with Tom Murphy who told me that in the Myers Briggs analysis, which is just a guide like anything else, but the sensing or the perceiving that 73% of humans are sensing and the other 27% are the more intuitive, abstract thinking. And so the majority of people don't really react to something unless they're tasting it or seeing it or experiencing it. And with some of these longer term risks like nuclear war, by the time we sense it, it will be too late. Do you think that has anything to do with our naivety on this subject?

Chuck Watson (03:05):

I think it is. And I think it's that we haven't been exposed to war in general and you look at the world war II generation, even the Vietnam generation is now getting older and the memories may not be so clear or such a small percentage of the US population has really seen or experience what a war zone is

The Great Simplification - Frankly #2

like. So you combine that with, as you say, a lot of people, if it's not in your face, you don't think about it and you don't really realize how bad something is. And so you see a situation like Ukraine and you think, well, we should do whatever we can even if that means risking this abstract thing called nuclear war. Well, I think people just don't appreciate the horrific nature of that.

Chuck Watson (03:51):

The other piece of it is from a leadership standpoint that our current leaders have lost touch. I think with all of the detailed nuclear war planning, they're thinking in terms of these weapon systems, they think, oh, we've got more precise weapons. We've got dial-yield. They're forgetting some of the lessons, particularly of the eighties. There was an exercise that was run shortly after Reagan became president, 1983. Had the lovely name of Proud Prophet and so Proud Prophet '83 was an exercise where he had guys like Casper Weinberger had come in and said, well, we can fight a limited nuclear war. Well, every time they gamed it out, it went strategic. No matter how small we started, no matter how careful the planning was, every single scenario ended up in a massive nuclear exchange. Of course that was-

Nate Hagens (04:53):

What does it mean, it ended up strategic? Strategic as opposed to what?

Chuck Watson (04:58):

Okay. When you think in terms of nuclear war-

Nate Hagens (04:59):

I don't know what strategic means.

Chuck Watson (05:02):

Yep. Yep. When you think in terms of nuclear war, you try to classify it into three broad categories. There's tactical, where you're using relatively small scale, say kiloton size devices, maybe up to 10 or 20 Hiroshima size bomb. You're attacking mainly military or maybe industrial. You're not trying to blow up cities. You're not doing them as what's called an aerial denial weapon where you're trying to render say an area so radioactive and crater that you can't pass through it. So that's a tactical war. You're using it as just another weapon in your tactical arsenal.

Chuck Watson (05:40):

A limited nuclear war is where you're kicking that up a notch. You're going after things like the industrial capacity of a country. You're going against bases within the home territory of a country. And you're not trying to kill populations, but you're willing to accept more of the population being impacted because you're going after things that are near cities. So for instance, you think of where I live the port of Savannah. Well, that would not be targeted in a tactical nuclear war, but in a limited conflict where you're trying to disable the ability of the US to deploy forces overseas or cut off imports, you would definitely bomb Savannah, even though that would kill half a million people. A strategic is when all the gloves are off, you're going after cities. You're just trying to wipe out the other country.

The Great Simplification - Frankly #2

Nate Hagens (06:32):

And is it... Leaving aside the US general public for the moment, do our leaders understand the distinction between tactical, limited, and strategic? I mean, certainly the military people do, but our Congress people and senators?

Chuck Watson (06:50):

The military people do. And I think that the military people also understand that there's a lot of gray areas between these and also you're depending an awful lot on the enemy doing what you think they're going to do and reacting the way that you would. And that to me is the way the greatest danger is from a military standpoint is I don't think our current generation of military leaders really understands Russia or Russians or how they think and how they calculate. The whole reason the Ukraine thing went the way it did I think is because of very grave miscalculations on the part of our leadership, which were partly informed by the military leadership. And I think we're in that same spiral of escalation now where you're starting with a conventional conflict that does have a risk of ending up in that tactical level.

Chuck Watson (07:42):

And as we found out with Proud Prophet, once you start to use nuclear weapons, it's almost impossible to keep it confined to these small scale devices because one side or the other decides it doesn't want to lose and starts ratcheting it. It's called deescalation through escalation. It's the language of nuclear war. You think of mutual assured destruction and nukes, nuclear utilization, target strategy. The acronyms show just how utterly insane this whole process is.

Nate Hagens (08:15):

So we talked about that and I encourage people who haven't listened to it. You and I talked about this three months ago on a podcast where you accurately kind of foreshadowed what is unfolding right now in the Ukraine. So let's move on to that. So mechanically, militarily, strategically, how can the Ukraine situation actually lead to a nuclear war? Walk me through that?

Chuck Watson (08:45):

Yeah, Nate, it's frightening. And again, I don't think that the leaders, people that are calling for a no-fly zone or even this morning's announcement with Biden about pumping more weapons into Ukraine, realize how dangerous that path is because we're starting conventional. And again, the question is, and this becomes psychological of you're dealing with a nuclear power and of course we're a nuclear power. Are we willing to lose once we get engaged in the conflict? And so once you cross that nuclear threshold, it becomes so dangerous. So the rumor is we're sending these more deadly drones, the switch blade drones, possibly others. So Russia is going to try to prevent that, which means bombing the supply corridors from Poland. So what happens if you start killing NATO or US or Polish 'advisors' or troops that are transferring and training those when you have maybe a near miss where something goes over the border, then what happens?

Chuck Watson (09:54):

The Great Simplification - Frankly #2

So do you then escalate? Russia may well have the ability to prevent these really large quantities of these weapons getting into the country by blowing up the supply corridors. Well, there's also an awful lot of refugees. We're now in the three to 4 million refugees from this conflict, they're going to be moving through the same corridors that the weapons are going to be coming in. So you're going to have an even bigger humanitarian disaster, which puts more pressure to do a no-fly zone, which means you start to get the risk of NATO forces in shooting down Russian forces once that happens. And then if Russia starts to actually targeting things like bases, well, the only way we can hit a lot of the forces that Russia has deployed are with very high conventional explosives or small scale tactical nuclear weapons. And that's where your threshold is. Do we cross that threshold or do we just say we've lost and pull back?

Nate Hagens (10:57):

Okay. So there's two issues here. One is how does a nuclear exchange actually happen? And I used to think that most of the risk was from an accident where it was unintentional, but you're saying that if we have an arms race where there's drones and then there's bombs, and then there's airfield that's attacked. That it's escalating. That once you're in that escalation between two major powers, there's no off ramp. There's no easy way once it starts to deescalate it. And if there is no deescalation, it ultimately leads in some nuclear exchange. Is that what you're saying?

Chuck Watson (11:39):

Yeah, you have to be willing to lose.

Nate Hagens (11:41):

What does that mean? Be willing to lose?

Chuck Watson (11:43):

In the case of a conventional war, one side or the other can overpower and even in the case of World War II with the devastation inflicted on Germany, they lost militarily. Well, with nuclear wars, a little bit different because if you've got an arsenal of nuclear weapons, are you going to be willing to lose a conflict when you know you can start using those nuclear weapons to inflict incredible amounts of pain and destruction on your adversary. So then it becomes this escalate to deescalate myth, which says that, okay, well maybe we blow up a city. Do we blow up a city in Europe? If you're Russia, you're thinking, well, we're starting to lose. Do we go ahead and nuke a city in Europe? Well, that's not their doctrine, but that's what people are kicking around.

Nate Hagens (12:35):

Is there-

Chuck Watson (12:35):

On the flip side, I'm actually more actually worried about from the US side of saying, because Russia has again, the defense department just said a few days ago, they're only using about 5% of their

The Great Simplification - Frankly #2

military potential in Ukraine. So the other 95% they're holding in reserve. Well, so if you start to get into an actual major conventional conflict, the fear is they can overwhelm NATO. So you keep going this back and forth. Well then on the US side-

Nate Hagens (13:06):

Wait, who's only using 90... Only using 5%? Russia?

Chuck Watson (13:14):

Yeah. Defense department study is they're only actually using about 5% of their military capacity. Now the number of troops is higher than that. But in terms of, they're not using a lot of the high powered, they're not using hypersonic weapons, they're not using the extremely high powered conventional weapons. They're basically slogging it out on the ground.

Nate Hagens (13:37):

So what are the odds of an accidental nuclear weapon going off? A deliberate one? I mean, can you break that down in this situation?

Chuck Watson (13:51):

Yeah. Accidental deployment, I think it's very small. We've had accidents in the past with bombs dropped and lost and that kind of thing, but modern nuclear weapons are pretty safe and reliable. You've got things that can't talk too much about the permissive action links and there's different mechanisms where without command authority, it's pretty hard for the US or Russia to set off a nuclear bomb accidentally. By far, the biggest concern is somebody making a deliberate decision to fire off a nuclear weapon for some purpose. You do it as a demonstration. Do you do it to try to, if you've got, say a collapse of Ukraine and the troops are headed towards the border, does a US president decide, well, are we going to stop them before they go into Poland?

Chuck Watson (14:51):

At what point do you cross that threshold? And you would like to think that they would say, no, we won't cross that threshold. But the current doctrine, particularly on the US side, is we can use limited nuclear weapons and not have it. We can use tactical nuclear weapons and not go limited or strategic. We can confine it to just the small scale devices.

Nate Hagens (15:18):

Is it possible that it's been 40 years since the Matthew Broderick movie War Games where they kind of figured out that there is no way to win a nuclear war or the TV show The Day After in Kansas, after nuclear war? Is it possible that some country with their back against the wall knows how horrific a nuclear war would be, and therefore they use a demonstration in some hinter lands and film it and say, "We have this capability. Watch out and back off." Is that a possibility?

Chuck Watson (16:01):

The Great Simplification - Frankly #2

I think that's a pretty small possibility because I think that you've got to demonstrate a will to use them. And so I think it's more likely of an announcement that, okay, we are going to nuke this facility and then they do it. I think that's more likely for the US to do that. It's possible Russia could, I think they've demonstrated that their doctrine doesn't really support that, ours does, but of course it may well be if things are starting to go very badly, they may decide to say, okay, we're going to blast this training facility with a tactical nuclear weapon, just to prove to you that we've got the will to do it.

Nate Hagens (16:46):

Okay. I want to get to the core question of why I called you up today, but let me just finish on this mechanical pathway. So the thing we want to avoid now is escalation of involving NATO tete a tete with Russia directly, because if we get on the escalation path, the off ramps are much fewer. Is that correct?

Chuck Watson (17:14):

Exactly. And I would, again, it kills me to say this, but we betrayed Ukraine by putting them in a situation where this conflict started in the first place. Now I don't want to get into politics of that, but the bottom line is we're now in a situation where escalation for the sake of Ukraine is putting everybody at risk. I think that we can now make a very bright line to say, don't go into NATO because NATO, you've got treaty commitments, you've got article five. We don't have that commitment to Ukraine. And I know it's a hard thing to hear, because you see the suffering, but the suffering that you're seeing in Ukraine is just a minor fraction of what could happen with even a tactical or limited nuclear war.

Nate Hagens (18:02):

Okay. Let's get into that. So what would a nuclear war really mean? How bad would it be? Can you break that down?

Chuck Watson (18:12):

Well, for one thing, when you're seeing these scenes in Ukraine, you look at Kiev or a better example is maybe Mariupol. If you look at these damaged buildings and the destruction there, remember that's all done with modern, conventional weapons. You can hardly imagine the scale that even a small nuclear weapon can do to a city. Hopefully people have seen the pictures of Hiroshima or Nagasaki. There's not a single building standing. There's no debris.

Nate Hagens (18:40):

They're flattened.

Chuck Watson (18:42):

There's not even bodies. The only places where you see bodies are the shadows from people where they were vaporized. I mean if you're within a mile of say a 10 kiloton device, which is a very small weapon, that's the level, the thermal energy is just incredible.

The Great Simplification - Frankly #2

Nate Hagens (19:05):

How big was the nuclear bomb in Hiroshima in kilotons or whatever?

Chuck Watson (19:10):

If I remember it's a 12, it was a 12 kiloton if I remember right.

Nate Hagens (19:14):

And what is the typical nuclear bomb now in people's arsenals?

Chuck Watson (19:19):

Now we've got a huge range actually. We've got dial-a-yield devices that can go anywhere from, and the exact numbers are classified, but something where even like 500 tons of TNT all the way to, so that would be half a kiloton. Of the strategic kind of weapons that we use, the counterforce they're called, the ones that try to blow up the other side's missiles silos or to blow up cities and industrial areas. Those are on the 400 to 500 kiloton. So those are 20 to 30 times the size-

Nate Hagens (19:52):

30 times Hiroshima. And we have 13,000 of these or something like that in the world.

Chuck Watson (20:00):

Yeah. Along those lines. And then of course there's many thousands of tactical, of the smaller scale devices.

Nate Hagens (20:08):

So, what are the immediate effects and the delayed effects of, and then what's the spectrum of, there could be a really small tactical exchange or something more widespread. Can you just give us a couple thresholds of what that looks like or could look like?

Chuck Watson (20:28):

Yeah, so really, I guess you would say there's really three levels. There's prompt effects. That's the blast wave, the thermal. Say a 500 kiloton device is as bright as the sun, 50 miles away. It causes severe like third degree burns as much as 20 miles away. So that's obviously a very high end. If you're talking say, Hiroshima, the area of destruction's just a couple miles across, but again, everything's vaporized, you get fires. That's a big issue in terms of delayed effects because immediate effect, of course is you get thermal damage, you get blast damage, you get fires, that's throwing soot particulates into the atmosphere. The thinking is if you start to get on the order of 50, 100 even tactical devices exchanged, you're going to completely make a mess of, if it's in the Northern hemisphere, weather, probably climate effects all the way into the Southern hemisphere, many nuclear winters, we talked about that in the last podcast that you start to get these down range effects, but are longer term climate kinds of effects,

The Great Simplification - Frankly #2

which we're talking about crashing the whole Earth's ecosystems with some of these kinds of scenarios, this isn't-

Nate Hagens (21:48):

And how many bombs would it take to do that?

Chuck Watson (21:52):

50, maybe as few as 25 to 50, depending on how they're employed could be as many as a hundred. An experiment I'm not too keen on trying to...

Nate Hagens (22:02):

So if there's a... Sorry to keep interrupting you, I know very little about this and I'm kind of embarrassed about it. I know a lot about climate change and biodiversity and economics and debt. I know very little about nuclear war. What would be the impact if there were some 1, 2, 3, 500 kiloton nuclear devices in and around Ukraine or Russia, would there be any impact in the United States? I mean, assuming there was no retaliation just devices going off in Europe and Asia.

Chuck Watson (22:41):

So a single device, you're talking radioactive fallout about 20 miles or so downwind, you're talking about immediate destruction, two to five mile radius for that kind of device. Some of the small ones, if you're talking a half kiloton device, then it's just a few hundred yards across is the area of damage and even radiation. So the reason by the way, why you want to use that is that you're ensuring the destruction of the target. Hardened targets would be eliminated. If you're talking about an airfield, you're rendering it unusable for any reasonable period of time, that kind of thing. So it's ensuring destruction of the target is the biggest thing for even a small device. Now I do want to say it was dangerous to use these small devices, partly because again, this escalation spiral, and let's say that we decide to use one of our new W76s which is a device that's fired from a submarine.

Chuck Watson (23:45):

Well, Russia, wouldn't be able to tell whether it's a less than one kiloton or a 30 or 40 kiloton designed to target some of their larger scale forces. So that's a good risk, is once you cross that threshold, how do you tell whether an airplane is carrying a nuke that's going to destroy a city versus something that's designed to carefully target, just one small facility. You can't tell. And that was part of the lesson from 1982-83 with Proud Prophet was the other side doesn't really know what you're up to and can't tell whether you're trying to be restrained or not. And that's where if you talk about accidents or mistakes, that's where they can creep in because if the other side isn't clear about what you're doing, they may decide, well, we need to shoot first. And it's not a Disney movie where Hanz shoots first in this case, it's massive carnage.

Nate Hagens (24:41):

The Great Simplification - Frankly #2

So is it possible that it's just hubris then that, oh, we should risk nuclear war in the Ukraine situation because emotionally, psychologically, it can't happen here. So if it happens in Asia, it's not going to impact my life. Is that part of the dynamic that's going on here?

Chuck Watson (25:04):

Yeah, I think part of it is people just don't realize how horrific these weapons are, is one piece of it. Another is even at the leadership level, the thinking is, well, if we do happen to do that, well, if we even hit a couple facilities in Russia, surely they wouldn't attack the US. Well, I think that's against Russian doctrine. If a tactical weapon is used on Russian territory, their doctrine, their philosophy says you use one in the US, on the US Homeland in response. We tend to think of stuff happening just in Europe or in Asia or wherever and not having direct physical consequences here.

Nate Hagens (25:44):

Wait.

Chuck Watson (25:44):

That's not case.

Nate Hagens (25:44):

Say that again.

Chuck Watson (25:44):

And they have the ability to do it.

Nate Hagens (25:48):

Say that again. If Russia is attacked with a nuke, there's a doctrine where they retaliate to the United States-

Chuck Watson (25:55):

That is correct.

Nate Hagens (25:56):

Continental?

Chuck Watson (25:58):

Exactly. The problem is we're fighting this on their doorstep. And so in order to prevent these actions in Ukraine, we would have to make strikes inside of Russia. Well, Russia has the ability to make direct strikes inside the United States.

Nate Hagens (26:16):

The Great Simplification - Frankly #2

Like Hawaii?

Chuck Watson (26:18):

No, like where you are or here in Savannah, Georgia, or Norfolk or any military base in the country, they have the ability to deliver either conventional or nuclear weapons on those facilities.

Nate Hagens (26:32):

And aren't there... I mean, this is totally naive on my part. Aren't there anti missile batteries that can defend against those things or not really?

Chuck Watson (26:42):

No, not for the continental US. They're very limited. And they won't work against the modern generation of Russian weapon systems because-

Nate Hagens (26:50):

Hence the point of this conversation is once nukes are flying, it's kind of game over.

Chuck Watson (27:00):

Pretty much. We have a very limited ability. We could shoot down maybe one or two ballistic missiles, but if you're talking maneuverable, hypersonic missiles, or even supersonic missiles fired from near range, like the Eastern Atlantic could reach most of the available targets in the Eastern US without being intercepted because we don't have any weapon systems that can shoot them down. I mean, we are so exposed because we think, well, wars will stay in other places. And it's been an issue the Navy has had a lot of discussions about how really inadequately prepared we are to fight in the near region within say a thousand kilometers of the US shoreline. We just don't have the ships, we don't have the airplanes, we don't have the weapons systems to do it.

Nate Hagens (27:53):

Okay. Well thank you for this update. Is there anything else you want to add to what would a nuclear war really mean and how bad would it be?

Chuck Watson (28:03):

I think there's two issues here. The biggest is that people don't really understand how bad it would be. Most Americans have not experienced war. I can tell you I was in places like Beirut and it gives me literally nightmares. You can't imagine what it is like to fight a war in a city. We're seeing that through our TVs in Ukraine. But what you're seeing there is a very limited snapshot of what a nuclear conflict would look like because you're talking single buildings that are still standing. You're not talking about large areas, vaporized. Again, that's not even getting into the longer term things like fallout, radiation and the whole thing. So my big fear is we have reached a point where people don't know how bad it could be. The leaders think that it's possible to win one. And that's a very dangerous combination.

The Great Simplification - Frankly #2

Nate Hagens (29:04):

Thank you for your expertise and time Chuck. I hope-

Chuck Watson (29:08):

Sorry it's a depressing topic.

Nate Hagens (29:09):

That we have... It is, but it's an adult topic. It's relevant to our times and I think more people should be talking about it. And I hope people in leadership are talking about it. We will be staying tuned and hoping for benign outcomes here. And I'm sure I will have you back my friend.

Chuck Watson (29:31):

Hopefully to talk about something more or less dangerous, but that's the world we live in my friend.

Nate Hagens (29:38):

Great. Thank you. Thanks Chuck.