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Risk confidence — By thinking the unthinkable, preparedness expert is ready for emergency

By Elaine Jarvik

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Sharon Packer is a cheerful woman who has thought of every dismal possibility. For example: a massive earthquake along the Wasatch Front in the dead of winter, a nuclear bomb that explodes when you're driving on the freeway, an electromagnetic pulse that wipes out America's entire electrical grid.

These are not idle musings. Packer is executive director of The American Civil Defense Association, whose headquarters were relocated to Utah from Florida last summer. To sit down with her for a couple of hours is to be forced not only to acknowledge that no, you yourself don't yet have a 72-hour kit, but also to think about the most unthinkable catastrophes and their grim ramifications — for which even a 72-hour kit won't be enough.

Some people are risk-averse and some people are risk-takers, but Packer is something else: risk-confident.

On an impossibly beautiful winter day, with the sun glinting off the snow in the pastures outside her house in Wasatch County, she explains her philosophy. "Deep inside, I do think something bad is going to happen." Then she explains herself: "I consider myself an optimist." Then she laughs, and adds: "I'm optimistic that something bad is going to happen — and that I can survive it."

No hope of survival?

Most Americans, on the other hand, either don't think about risks or don't think they can live through them. This is what Packer hears all the time: "If there's a nuclear war, I'd rather just die right away." What these people don't understand, she says, is that nuclear war is survivable. So is electromagnetic pulse damage, which she predicts could kill half of the U.S. population — 150 million unprepared people — within the first six months of an attack.



Wasatch County resident Sharon Packer, executive director of The American Civil Defense Association, walks through an underground tunnel.

Jeffrey D. Allred, Deseret Morning News

You don't think any of this is going to happen? That's not the point. Packer is all about *could*.

Let's say she's driving down Parleys Canyon and all of a sudden the radio station she's listening to goes off the air and her car stalls and she looks around and all the other cars on the road are stopped too. Packer has pictured this scenario many times.



A portion of the two-week food supply Packer keeps on hand. "I'm optimistic that something bad is going to happen," she says, "and that I can survive it."

Jeffrey D. Allred, Deseret Morning News

This will be a signal that the country has been the victim of an electromagnetic pulse attack. EMP — the intense electrical pulse produced when even a small nuclear bomb is detonated at high altitudes — is Packer's biggest worry. In less than a second, the pulse can melt the wires of every piece of solid-state electronics, and the entire electrical system, in the United States.

Likelihood is increasing

Risk, she explains, is what you get when you multiply probability and consequence.

The probability of an EMP attack gets larger every day, she says, because "a whole lot of people are developing weapons, and some of these people are not very responsible." The consequences are increasing all the time, too, she says, as we become more and more dependent on solid-state electronics.

Even a country with one low-yield bomb, deployed from a missile shot from a freighter in U.S. coastal waters to an altitude of 200 miles, could turn the United States into a Third World country within moments, she says. The damage is so swift that most lightning-protective devices are useless.

An EMP isn't dangerous to our health. (When a nuclear bomb explodes in the atmosphere rather than on the ground, there is no fallout, blast or thermal effect.) But the consequences of the EMP will destroy us just the same, Packer says. We won't be able to start our cars, use our phones, fly planes or use computers. We won't be able to pump gas, harvest or deliver food, collect garbage, purify water or flush most of our toilets. Our backup fuel to run our backup generators will last only a short while, she says. We will quickly run out of water, food and other necessities of life, and the entire infrastructure of the nation will fail.

To survive, each of us will need our own supply of water or a way to purify the water we'll be forced to retrieve from streams. We'll need a supply of food that won't spoil and a way to cook it. We'll need a way to stay warm. We'll need a stockpile of medications and a high-frequency amateur radio that has been carefully protected in a metal Faraday cage. And we'll need all these things until the power system has been restored, which will most likely take more than a year, she says. One example of how hard it will be to patch the infrastructure: The United

States does not produce or stockpile any large power transformers; instead it imports them from overseas, and we'd need thousands of them to restore our power. And even if we did import them, we'd have no way to truck them to remote locations.

Personal preparation

Packer keeps an EMP alarm in her master bedroom, so even if she's sleeping she'll know that there's been an attack. During the day she keeps her radios tuned to a station not "hardened" to EMP. If her radio suddenly goes blank when she's driving, here's what she'll do: remove the cables from the car battery and hope the computerized ignition resets. If she can't restart her car she will open her trunk and get out her 72-hour kit, then head for a place with a lot of dirt or concrete between herself and the effects of the thermal blast. She will have already scouted out the best place, because wherever she's driving she's always on the lookout for a culvert or an overpass or a basement she could crawl into.



Sharon Packer in one of the bomb shelters she has built.

Jeffrey D. Allred, Deseret Morning News

She will "duck and cover," because it's possible that the EMP is precursor to a full-scale attack from a country such as Russia. She knows that's not very likely (in the first place, if an enemy launches a full-scale nuclear war, it will probably be at night when we're most vulnerable, she says) but, just in case, she will take precautions. She will wait in the culvert for several hours, just to be sure.

If there has been a thermal blast, she'll stay there for two days or until the fallout — which she will measure with the dosimeter that she always carries in her purse — has dropped below 10 rads per hour. If she's not too far from home she'll try to get back there. She will wear a shower cap and raincoat, also from her 72-hour kit, to protect her from whatever fallout is left.

She has her own "multihazard" shelter that she can live in, with as many as 49 other people, for months, if necessary.

You can't count on the government to protect you, says Packer. If we could count on the government, she says, there would be bomb shelters under every school and church and public building in the United States.

We should mention here that Packer, in a separate job, sells shelters. This could be construed as a conflict of interest for the director of an organization that encourages people to be prepared, but Packer has a different way of looking at it: "I would love for the government to put me out of business — and I'd be happy to teach them how to do it."

People should be angry, she says, that she has a bomb shelter and they don't. They should be angry that Vice President Dick Cheney has a safe place and they don't. Why doesn't the government provide shelters for all of us? "Because we don't ask," she says.

She and her business partner, Paul Seyfried, sell most of their Utah Shelter Systems in New York, Florida, California and Oregon (with fire and earthquake the prime motivation for some buyers). About three-quarters of her customers are attorneys or physicians.

Technically, when there's no fallout — after an EMP attack or a massive earthquake, for example — you wouldn't need an underground shelter. But there's something else to be afraid about, she says: all the unprepared people who will want to get at your water purifier and your year's supply of beans and your insulated blankets. Mobs of people you will have to keep out.

Emphasis began early

In the late 1940s, when she was 8 years old, Packer helped her brothers dig a bomb shelter in the family's back yard in Murray. The shelter was just a hole with a board over it, but if there had actually been a nuclear war, she says, "I would have had better protection than 95 percent of people in the U.S. today."

When she grew up she received a master's degree in nuclear engineering from the University of Utah. She studied under Dr. Gary Sandquist, who is now secretary-treasurer of The American Civil Defense Association board. The president, Jay Whimpey, is also from Utah. The most famous former board member was "father of the hydrogen bomb," Edward Teller.

Private, nonprofit TACDA was incorporated in Florida in 1962 about the time of the Cuban missile crisis. Its headquarters is now in a small office park in Draper. Currently only 400 people are dues-paying members. For \$36 a year they get the quarterly Civil Defense Journal as well as access to reports about topics such as thermal effects and water purification. Nonmembers can buy radiation monitoring devices and emergency supplies at TACDA's Web site.

"Civil defense" has a kind of nostalgic ring to it, reminiscent of what, in a sense, was a more innocent time, when there was a threat of nuclear holocaust, but nobody had yet flown planes into American buildings. These days, "civil defense" has been eclipsed by "homeland security."

But the Office of Homeland Security's recommendations for personal preparedness are "way too minimal," Packer says.

National and state government officials don't tell people about the danger from an EMP, because "they're not knowledgeable about its effects," she says. Recently, Packer traveled to

New Jersey to address FEMA emergency management workers. Out of 200 people in the room, she says, only two knew anything about electromagnetic pulse effect.

Packer has recently posted, free of charge, the 2004 testimony of Lowell Wood before the House Armed Services Committee, at tacda.org. Wood, a Visiting Fellow at the Hoover Institution on War, Revolution and Peace at Stanford University, and a staff member of the Lawrence Livermore National Laboratory, testified that EMP "is a weapon of mass *hardware* destruction" that "could cripple much of the U.S. military machine and which also can lay waste to modern American civilization."

Wood testified that "even a modest, single-explosion EMP attack on the United States might well devastate us as a modern, post-industrial nation." He said that the cost of hardening mass-produced systems against EMP effects may be as low as 1 percent of the cost of each item.

"We have got to alarm people," Packer said. Not to scare them, but to "get them out of denial and inactivity

and direct them toward a solution."

Katrina a clue

The government's response during Hurricane Katrina should be a clue, she says, that we cannot count on government assistance in the face of a large natural or man-made disaster. If we have a huge earthquake along the Wasatch Fault, FEMA cannot be counted on to provide shelter and food, she says. If an earthquake happens in the middle of a frigid January, she asks, how will your family even stay warm?

The odd thing is that Packer is not a big worrier. When she gets on an airplane, for example, she's asleep before the plane even takes off. Why worry about something you have no control over, she says. "There's nothing I can do to keep it in the air."

She reserves her energy for the things she can do something about.

To spend a few hours with Packer is to come away determined to be prepared, too — and then, afterward, to realize you'll probably never get around to it. Besides, if you make your family build an alcohol stove out of a paint can and toilet paper, and you outfit everyone in arctic-ready foam-insulated clothes, won't people think you're weird?

"They've looked at me that way for a long time," laughs Packer. "Since I was 8. You develop a thick skin."

Here's what she tells people who say it's silly to prepare for long shots — for fallout and EMP and biological warfare and earthquakes that jar the Wasatch Front in the middle of winter: "You have to be right every day. I only have to be right once."

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