**Transcript**

***60 Minutes***

**"Project Seafarer"**

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Produced by Richard Clark
Hosted by Dan Rather

*Dan Rather:* You may have heard of it—a Navy project called Seafarer. The original name was Sanguine. It's a $700,000,000 submarine communications system that for the past decade has been a very expensive idea in search of a home. In every part of the country where the Navy has set foot talking Seafarer, there has been an uproar. Homefolks, politicians, scientists—they all turn out to have at it. Will Seafarer ruin the scenery? Will it be a major target for enemy warheads? And most important, what about reports that it could be harmful to the people who would have to live with it?

*Voice Over:* The story really began when the Navy found out how to run submarines with nuclear power, how to arm them with nuclear missiles, and send them around the world to run silently, undetected. But there's a hitch. To be undetected means to run deep, and included in the arsenal of these super-sophisticated monsters is not a way to receive messages when they're hiding deep underwater. They have to run shallow and drag an antenna to do that. So the problem—oversimplified, I'm sure—is how do you keep our subs deep and undetected and still tell them to rise up and shoot if Doomsday happens? Well, they found a way: Sanguine or Seafarer. From a land base it would beam extremely low-frequency radio waves (ELF) to our submarines all over the world. Which brings us to the crunch. Because to get a message way down here takes a ground antenna that is not your everyday variety of antenna.

*Capt. Pollack:* What we're concerned about with Seafarer is the energy going through a cable such as this which is planted in the ground

*Dan Rather:* Is that the actual size of the cable?

*Capt. Pollack:* This is the actual size of the cable.

*Dan Rather:* Captain Charles Pollack is the man in charge.

*Capt. Pollack:* The antenna would have about 2400 miles of antenna cable. If you draw a line around the extremities of that antenna-arrayed layout, it would encompass about 4000 square miles.

*Dan Rather:* So, somewhere in the good old U.S. of A., Pollack has to string out 2400 miles of antenna cable, buried a few feet underground. It would look something like

this—a pattern resembling loose strings in a tennis racket. The intersecting lines would be about 3½ miles apart, and the whole thing would cover 4000 square miles of field and forest—some of it along existing right-of-ways, like roads and powerlines, some of it through newly cleared paths. Is it safe?

*Capt. Pollack:* Yes, absolutely.

*Dan Rather:* Absolutely? Well not to people like this scientist. Are you telling me there's a possibility that electric current, generated in a fashion such as this, could possibly cause heart disease and/or stroke?

*Dr. Becker:* Yes.

*Dan Rather:* You have to know that that's a mind-blowing thought for a lot of people, including me?

*Dr. Becker:* I'm aware of that.

*Dan Rather:* Dr. Robert Becker is Chief of Orthopedic Surgery and a medical investigator for the Veterans Administration in Syracuse, New York. We have to pause here for a bit of explanation. Historically, the scientific community, almost in its entirety, has maintained that, to be harmed by electricity, you had to be shocked or burned; that the low-level doses surrounding us most of the time—from electrical appliances in the home, from power transmission lines or from the Navy's Seafarer project—could do us no harm. That's the Navy's argument. Now, are you telling me that it's fair to say, accurate to say, that a housewife is exposed to more low frequencies in her home in the course of doing her day-to-day chores than she would be from Seafarer?

*Capt. Pollack:* Many, many times more.

*Dan Rather:* You're certain that is a scientific fact?

*Capt. Pollack:* That is a scientific fact.

*Dan Rather:* Dr. Becker wouldn't disagree with that. What he'd say is that you may not be safe, even in your kitchen. For twenty years, he and his staff have been experimenting on the effects, if any, of low-level radiation on living things. He is one of a small, but growing group of scientists around the world who are turning up information making them believe that low-level electrical fields do affect us. For instance, using very low voltage currents, he has made broken bones that wouldn't heal by themselves grow together again. And like most scientific discoveries, it's a double-edged sword. If those carefully controlled low-level currents can heal bones, well, it makes people like Becker wonder about uncontrolled electrical fields from household appliances, powerlines and Seafarer.

*Dr. Becker:* I was a member of the first ad hoc committee to evaluate the biological studies that were performed for Project Sanguine. And I most certainly sat there and listened to several studies that had very definite effects, yes. Animals that are exposed

grow at a slower rate than control animals. A number of projects have shown this to be true. The second area in which definite effects do appear is that exposure to this type of field seems to produce stress.

*Dan Rather:* Is it true that the Navy repressed that report for better than two years?

*Dr. Becker:* The Navy did not disseminate the report widely.

*Dan Rather:* This is the report that he's talking about. It was done at the request of the Navy by a group of top scientists. They reviewed experiments performed on possible effects of ELF radiation on living things and raised some red flags. That was in 1973. The report finally got out a year ago.

*Capt. Pollack:* Now, in looking at some of the early experiments, there were effects noted. There were differences of opinion among—among the scientific people, as to whether those effects were significant. There were also differences of opinion as to whether they were deleterious. It's our position now, and I fully support that position, that we have not seen any significant deleterious effects that can be attributed to a Seafarer system.

*Dr. Becker:* Human volunteers were exposed to the same sort of magnetic field that the Sanguine antenna would emit, and there was a very definite indication that following such exposure for a 24-hour period of time that these people experienced considerable elevation in their serum triglycerides.

*Dan Rather:* To a physician, elevated serum triglycerides are a danger signal. It could indicate stress, heart attack, or a possible stroke. The experiment Becker mentioned was done in Pensacola, Florida, and out of their test facility in Clam Lake, Wisconsin, the Navy also examined the people working there. It wasn't a controlled experiment, but the results were similar to those turned up in Pensacola.

*Dr. Becker:* A significant number of them also had elevated serum triglycerides as well.

*Dan Rather:* A significant number?

*Dr. Becker:* A significant number.

*Capt. Pollack:* Elevated triglycerides can come from a large number of different reasons. It can come from diet, it can come from alcohol, it can come from sickness such as diabetes. The question is, did the people that we saw down there (which is a very small number), were their elevated triglycerides due to other causes or was it due to an ELF?

*Voice over, Dan Rather:* The Navy duplicated the experiment using monkeys instead of humans, and they say the monkeys are just fine.

*Dan Rather:* But aren't you troubled by this research project as you describe it with humans that at least raise the question that exposure to low frequency could make a difference in one's blood chemistry?

*Capt. Pollack:* Mr. Rather, one of the most difficult research efforts that you can undertake is experiments with human beings. Human beings are not as easily controllable as are animals. And the National Academy of Sciences, several years ago, in reviewing our research effort, specifically recommended that no effort be undertaken with human beings.

*Voice Over, Dan Rather:* That 1973 report minced no words on the subject. Under the heading "Urgent and Absolutely Necessary," the panel of scientists recommended further animal *and* human studies. Since the human part of that is not being done, the first people to be exposed to radiation from Seafarer would be the people living on that grid.

*Dan Rather:* The Navy over the years has spent almost $100 million on this project. They tried to put it in upper Wisconsin but Wisconsin's Melvin Laird, who was Secretary of Defense at the time, vetoed that idea. They looked at government-owned land in the Southwest but say that geological features there would make it cost too much. So they have set their sights here, in the far north of Michigan, in a beautiful, remote area known as the Upper Peninsula. There is a lot of wilderness here and about 150,000 people. The fishing is great; so is the hunting and the scenery. What money there is to be made comes from tourists, some lumbering, and some mining which around here provides a few jobs and a lot of memories of what it used to be. In short, it's not an area of great monetary reward. But the people get a smug satisfaction out of sitting back and waving to those of us in hot pursuit of progress. And if the Navy dreamed of easy pickings when they saw all this land and so few people, well they learned their lesson quickly from the likes of Eunice Carlson. She was born and bred up here. She owns a farm and is a professor of microbiology.

*Eunice Carlson:* Many find it offensive that something which is not good enough for the people of Wisconsin, and they didn't want it in Texas, then suddenly it is good enough for the people of the Upper Peninsula.

*Voice over, Dan Rather:* It didn't take long for the word to spread.

*Woman handing out flyers:* We oppose Seafarer. Our group has taken a stance on it.

*Voice over, Dan Rather:* Seafarer/Sanguine gained power with the north country weather for street talk, mostly rumors about those strange things called ELF radiation and what they might do to folks.

*Woman on street:* It'll hurt all the children, the farms, it'll bring in all kinds of different—what would you call it—that radium action or something like that? Well we don't need that here.

*Voice over, Dan Rather:* Perhaps for the first time the Pentagon ran into cookie power: bake sales to raise money to pass the word the Navy is coming.

*Man at microphone:* Does the United States Navy have data…

*Voice over, Dan Rather:* There were public hearings and Capt. Pollack got a reception about as warm as an Upper Peninsula blizzard.

*Capt. Pollack:* Well, let me be very candid with you…

*Man at microphone:* Please do.

*Capt. Pollack:* …and I always will be.

*Voice over, Dan Rather:* But Pollack's biggest problem was so many people up here didn't believe the Navy. Example: land the antenna would cut through is of course a big environmental issue. But a whole lot of eyebrows went up when the Navy's opponents learned about places it wouldn't go. For instance here (Ottawa National Forest Wayside, Perch River): after crisscrossing thousands of square miles of private forest and pasture land, the Navy's grid would end when it gets to this national forest.

*Voice over, Dan Rather:* It wasn't always that way. An early Navy map showed Seafarer extending far into the Ottawa National Forest. Now the whole national forest is excluded. The Navy said they made the change because the land isn't suited geologically for the antenna. Plus …

*Capt. Pollack:* We tried to avoid going in and disturbing areas that we considered wilderness areas or areas that had particularly scenic beauty.

*Eunice Carlson:* Again, they told us that it wouldn't hurt our environment at all, yet they don't want it on their property.

*At hearing:* …beyond any question that the rats didn't grow up.

*Dan Rather:* Of most concern to people, though, were those reports of what the grid might do to them. The Navy countered: More scientists were following up the original studies. But the folks here had heard stories about what happened to some of the original scientists.

*Dr. Becker:* We know of, I believe it's five specific projects in which positive results were obtained, when the projects were terminated and the money just disappeared. There was no more to continue the work.

*Dan Rather:* Now, is this a definite pattern?

*Dr. Becker:* It appears to be.

*Dan Rather:* That when a study begins to find that there may be adverse effects, that the money dries up?

*Dr. Becker:* Not even adverse effects. *Any* effect.

*Capt. Pollack:* What we had to do is to try and determine which of the research efforts appeared to be the most fruitful, where we should apply the money and where we should apply the resources in order to get the best overall understanding.

*Dan Rather:* Meanwhile, the Navy has called in the National Academy of Sciences to oversee and evaluate further experiments. And the NAS Committee has issued a one-sentence interim report saying that, so far, they think Seafarer is safe. But Dr. Becker isn't impressed. Some members of that NAS panel have previously testified publicly that radiation, similar to that of Seafarer, isn't harmful. And Becker maintains it would be awkward for them to change their minds in public.

*Dr. Becker:* For example, if a person has already publicly gone on record that the voltage field from a transmission line, a million times stronger than that from the Sanguine antenna, is harm*less*, then obviously he cannot do an about-face and say the Sanguine antenna *may* be harmful. So that a number of people on this committee, I would feel, have a pre-bias.

*Dan Rather:* Is what you're trying to say that we're playing with a stacked deck?

*Dr. Becker:* I think so, yes.

*Capt. Pollack:* I personally find it difficult to believe that a body as prestigious as that would in a program as controversial as Seafarer would allow anything other than a balanced committee to be appointed.

*Dan Rather:* Why do you suppose the opponents make that charge?

*Capt. Pollack:* They may be concerned that the National Academy of Sciences report will substantiate the Navy position, that is that there is no significant adverse effects that have been demonstrated. I would be perfectly content to live right directly over the Seafarer antenna 24 hours a day.

*Dan Rather:* And have your family live there?

*Capt. Pollack:* And have my family live there.

*Dr. Becker:* I certainly would not want to live in an area where such an antenna system was operative, nor would I want any of my family living there. I cannot say for certain today that this would be hazardous, but there exists in my mind a very clear-cut indication that it may be.

*Dan Rather:* Where from here? Well, before the Navy set foot in Michigan they promised the governor that if he didn't want Seafarer in the Upper Peninsula, they wouldn't build it there. The governor in turn promised the people there that if they didn't want it, they wouldn't get it. In past months people in 9 counties affected have, by a 4-to-1 vote, told the Navy to stay out. The governor concedes that's pretty convincing but he says he'll wait for that final National Academy of Sciences report—due sometime this

spring—and then maybe hold another vote. And the Navy? They're still convinced that someday we'll be talking to submarines from the Upper Peninsula.