Interview: Hal B.H. Cooper, Jr.

Specifications for The Bering Project

Hal Cooper, PhD, a Seattle-based transportation consultant, is a longtime advocate for an intercontinental railroad connection across the Bering Strait, and for development corridors—rail, utilities including electric transmission, natural gas, and water, and highways—on key routes in the Americas, and worldwide. The following are excerpts from an interview he gave to Marcia Merry Baker, published in EIR*, June 20, 2003.*

EIR: The Bering Strait crossing, what is the physical geography involved? How long is the span to link up the continents?
Cooper: It's 53 miles, or 85 kilometers, across from Alaska to Russia, at the Bering Strait, at the minimum distance.

EIR: What might be a comparable strait? The Chesapeake Bay? China just began work on a 22-mile bridge across Hangzhou Bay, which will be the world's longest trans-oceanic bridge.
Cooper: The English Channel is very similar to it. And, of course, the mouth of the Chesapeake Bay would be another. But I think the English Channel is the analogy that's closest to the Bering Strait.

EIR: What about the physical setting there? Does it still compare with the English Channel and Channel Tunnel?
Cooper: In some respects, it's more difficult, because it's farther, but it isn't as deep. It's 180 feet, versus about 250. There are two islands out in the middle of the Bering Strait—Little Diomede, on the United States side, and Big Diomede Island, on the Russian side, that would make it considerably easier, because your longest underwater distance is about 23 miles. So it's actually less than the English Channel.

EIR: There are some spectacular new bridges in the world, for example, those reconnecting Scandinavia with Western Europe. In the approaches to the tunnel to the Bering Strait, are bridges involved?
Cooper: No. You would have a straight tunnel across. There have been some proposals for a bridge, and I'll get to that. But there would be a straight tunnel; there would be a straight two- or three-bore tunnel. It would go through the islands. It would be under the water—probably 50 or 75 feet below the water line.

Your soil there is a granitic, and granite-chalk type, and it's actually relatively stable to dig. You are quite a ways north of the active geologic zones where the earthquakes are. So it's actually relatively stable there. In some respects, it would be easier to dig than the English Channel was, because there are not these rock fissures going down that caused so much problem there near the French coast for the English Channel Tunnel.

EIR: In other words, you are saying—whether two- or three-bore—it's an excavation matter. Some others have said that you could drop onto the seabed, a kind of sealed-box affair.
Cooper: You could do that. But the only concern that I would have is the flows of ice through there, and the possibility of dislocating it. That would be, to me, a concern. I would prefer to put it down in the rock, although you could put the tubes on the floor, provided that you dug near the shores, because of the ice. But you'd have to be very concerned about the flows of ice through there.

EIR: So this would be a first, this length of actual excavation. It would be the longest?
Cooper: To my knowledge, yes. It would be the longest in the world. But you know, it isn't that much longer from other things that already exist, that it would be a revolutionary breakthrough. Because actually, when you look at the single, particular sections of the tunnel, it's less than what the English Channel is now. . . .

It's interesting to point out that, in the conditions of the Arctic, you could build the fanciest railroad—double-track, electric, fully resistant to any frost conditions, which, of course, you have plenty of there, and the cost would be about $7.5 million a mile.

EIR: How does that compare with other modes?
Cooper: Well, I'm going to compare it to a pipeline. And you can carry any commodity in either direction on the railroad, including all the oil you want.

Now, if you build a pipeline to that area, and we're extrapolating the cost of the Alaska pipeline, which was completed in 1979, at a cost of about $10 million a mile, it would probably be about $15 million a mile, *at a minimum, now,* for a pipeline very similar to what was built in Alaska.

EIR: Because of permafrost, and so on?
Cooper: It has to be built elevated; it has to be be able to resist heat. You have to have foundations. And all sorts of things like that. And, the cost would be a minimum of $15 million a mile, and you could ship one commodity in one direction. And in fact, believe it or not, the railroad would have a greater capacity to carry oil than the pipeline would.