Communication between moving vehicles during the narrow window of the late 1990s

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The long holiday weekend in the United States means that there are probably going to be a lot of people on road trips. Back in the old days before mobile phones, if you had multiple cars traveling together on a long trip, you had to stay within visible range of each other so that you didn't get separated. And if the car at the end of the convoy needed to pull over to take a bathroom break or something, they needed to rush to the front of the group and pantomime through the window to the passengers in the lead car to tell them what they were going to do, and then everybody would pull over together. I still remember those days. Of course, nowadays, you'd just whip out your mobile phone and call the other people in the group. "Hey, we need to stop for a bathroom break. You can join us, or we'll just catch up with you down the road." There was a narrow window of a few years where WiFi hardware was generally available, if somewhat expensive (in the form of a ~~PCMCIA~~ PC Card for your laptop and a $1000 base station)[1] and mobile phone coverage along highways in less populated areas was spotty or nonexistent. That was the window of time during which I wrote a chat program for multi-car road trips. The idea was that we would establish an ad-hoc wireless network among the laptops, and the program would act as a peer-to-peer instant messaging program. We would be the world's fastest-moving WiFi hotspot. As long as the cars stayed within around 100 meters of each other, we would (presumably) still have connectivity. The program was robust to outages, and it could handle devices dynamically coming into or leaving communication range. With this technological contraption, we didn't have to make everybody stop and pull over in order to decide where to have lunch. We could just start an IM conversation and work it out while still moving. (But if we wanted to take a bathroom break, everybody had to stop; otherwise the cars would get out of range.) I over-engineered this program, designing it to handle chats that if printed out would require a roll of paper over 300 kilometers long. In other words, for a 300km trip, you would have to be sending instant messages fast enough that you could drive on the paper coming out of the printer. (Related.) Another way of doing the math was observing that the program could in theory handle a cross-country trip where people were sending 500 messages per second the entire time. (Well, except it would have run out of memory long before hitting its design

limits.) This program met an even sadder fate than my in-car mp3 player. At least I got to use that program a few times. Mobile phone technology quickly improved to the point where the car chat program was no longer necessary. It was never used at all!

[1] I still have my $1000 base station packed in a box somewhere. I wouldn't be surprised if my my mobile phone now has a faster data plan than that thing.

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