HISTORY CORNER

SRI "Internet Van" to Be on Display in Computer History Museum

By Don Nielson

The Computer History Museum in Mountain View, California, has the largest collection of computing-related artifacts in the world. Its curators are nearing completion of a lengthy timeline of computer history, with items representing milestones on display. SRI will have some presence in this timeline. One of our contributions will be Shakey, SRI's early mobile robot. Another will be Doug Engelbart's legacy of interactive computing. Yet another will be a scale model of a mobile laboratory built in part to test the early development of digital networking.

The van was a capital equipment purchase by the Telecommunications Sciences Center in the early 1970s. This "bread truck" housed the equipment that enabled the first mobile digital network, the Packet Radio Net, an ARPA-sponsored effort. That wireless network, along with the existing ARPANET and an emerging digital satellite network, formed the basis for the world's first packet-based internetworking. Researchers in this flexible test bed vehicle helped measure some of the parameters needed in the design of the Packet Radio Net and, with the advent of the internetworking protocol, TCP, saw the first such transmissions in 1976 and 1977.

Through the genius of Don Cone, the van was outfitted with a shielded generator, flexible equipment racks, and air conditioning. It is tall enough for passengers to stand erect, and it ferried hundreds of visitors, including three-star generals, around the South Bay and other areas in the United States for demonstrations of digital networking.

But these research and comfort features made the van too large for the museum to place directly in its timeline. Four current SRI staff members built and delivered the exquisite scale model of the van pictured here. The equipment of interest faces us and consists of the rack of packet radio equipment on the left and, on the right, one of the first embodiments of Internet telephony, now called VOIP. Look closely and you will see a representation of the Mickey Mouse telephone used in the late 1970s as an illustration that any phone would work over this new packet-switched voice channel that was simply another service of this wonderfully flexible new world of a digital Internet.

The actual van has had the glory of public display. About a decade ago, organizers of a computer conference in San Jose and then the Computer Science Museum expressed interest in showing it. To comply, we had the SRI motor pool get it running, took it to the car wash, and drove it to San Jose. Later, SRI donated it to the museum, where, in December 2007, it was the centerpiece of a celebration of the 30th anniversary of the birth of internetworking. As they say, the rest is history—and in this case it truly is.

Scale model of the SRI van used in the early development of internetworking.