

[This is a letter from Bernard J. Cancelli, a telecommunications engineer in Paris, who was contacted by a reference librarian whom we had asked to help us about a month ago.]

Mr. Rakoto and Mr. Rigault, of the ENST, passed along to me your request for information, dated Nov. 6 2000. Here are a few brief responses.

In 1944, only large cities were serviced by fully automatic exchanges (rotary system in Paris, Nantes and Marseille, the R6 system in the other provincial cities). In small towns like Epernay there were only small exchanges, which guaranteed local communications and for neighboring areas with automatic or semi-automatic exchanges. Intercity communication was entirely manual.

The most vulnerable part of these exchanges was the main distributing frame, where local and intercity lines were connected. It would be easy to destroy with well-placed explosive charges, and repairing it would take much time, especially if a fire were to finish the sabotage: the cables were all insulated with cotton.

But it does not seem credible to me that communications between the high German command in Berlin, and the German forces in Northern France, would be interrupted by a sabotage of a telephone exchange in Epernay! The term "telephone exchange" does not seem to me appropriate for the plot of a Ken Follett novel.

What should be attacked is the transmission system of long-distance intercity lines by underground coaxial cable, such as Paris-Metz or Paris-Strasbourg, which doubtless passed by Reims and therefore not far from Epernay. This system is constituted by significant transmission intersections with multiplexing/demultiplexing [*tr. multipliers? don't know the terms*] in the large cities through which these cables passed, and also by amplifying stations (repeater stations) every 20 or 30 km for the length of the cable.

[Cancelli describes here a photocopy which he has sent along, from a book we have already examined, about Keller and the "Source K"]

In order to obtain maps, photos, and more details, you would have to find a technician specialized in analog transmission in coaxial cables, with vacuum-tube electronics—they are an endangered species. Unfortunately I have no names for you. *I'm a switching engineer!*

Good luck in your research
Cordially,
Bernard Cancelli