

Ken Follett

From: Bernard Green [Syemon.Es@btinternet.com]
Sent: 20 November 2000 14:43
To: Ken Follett
Cc: Dstarer@bellatlantic.net
Subject: Re: Phone sabotage

Ken

I was just about to mail to you when your mail arrived.

What is the dead line for the decision on this part of the plot ?

Information so far is that the RiechsPost Telephone system carried almost all the military traffic inside Germany. The French system was used in France with a percentage of lines in each trunk route being allocated to military traffic. As yet I do not have a source for the routing of the main crossing points France Germany etc. One text suggests that Colmar may have been one of the near border central nodes.

There is also passing mention of line of sight radio links, early microwave, covering the whole of Europe. It claims these were developed between the wars. Britain had a No 10 microwave system in use in Europe in 1994 to provide fast set up of communications so Germany probably had something similar before we did.

There doesn't appear to be a good source of information in Germany, if there is the people I have asked don't know about it.

I have a transcript of an 1993 interview with a Robert Chapius who worked on the Long Line Units for the French telephone service.

He mentions some involvement with resistance and Germans. He was born 1919 and interviewed in Zaragosa Spain 1993 I will edit out the un-necessary bits and attach it to an e-mail later

Perhaps Dan could follow this up, Robert may have far more information

IEEE History Centre Rutgers University New Brunswick NJ USA Interviewer Frederick Nebeker for the Oral History program

The main training school for signals troops was in Halle It was refered to as the Heeresnachrichtenschule fu:r Nachrichtenoffiziere und Technisches Personal

Heer = army nachrichten = signals/information

>>>| 4. The Resistance destroy the exchange cable chamber

MDF .

| through which run all the cables for all these
systems. They also burn
| the records cards which show how the cables are
connected. They also
| burn the MDF (could someone please decrypt this
acronym for me?).
| Because the chamber is in the basement of the
building, the repair team
| will first have to use digging equipment to
access the cables. Then they
| will take several weeks to correctly reconnect
all the cables without
| the help of the records.<<<

MDF = Main Distribution Frame

Two sets of terminals on large racks, one set has every line from the exchange equipment. the other set has the street cables connected to it. Jumper links then link the pair in the cable from the street to the necessary line from the exchange. On the exchange side the lines are in regular numerical order, on the street cable side they are in a jumble as each cable will have a random selection of numbers depending on which subscribers or remote equipments are served by it.

To destroy the MDF beyond use would need a low temperature fire able to burn ebonite and paper insulation, without the insulation the lines would short out and not work but the copper would remain intact and could be read to re-create the records. To destroy it beyond repair would require the fire to be hot enough to melt the copper wires. An accelerator would be needed to get the fire burning hot enough before the fire team arrived.

The Germans would have made duplicate copies of the records in the exchange and kept them in a separate building. Those will have to be destroyed or at the time of copying a false set of originals should have been used.

If the military used the same repair method as used in Germany and England today the cables will be pulled out at the next manhole down the road and patched from there with the cables laid on the surface. This will provide for the most urgent lines to be re-connected in very short time. The loss of the MDF will present a problem but again cutting back to undamaged cable between MDF and the rack of the exchange would provide rapid restoration of the urgent lines.

Talking to my ex-colleague in Germany he would go for the battery breaking but also take out the re-charging circuitry as well. Looking at elementary demolition suggests that charges placed in the tank against the side would be very effective (ala the dam busters raid) Not only would they burst the tank sides they would ram the positiv and negative plates together causing a short circuit. If the tank didn't burst the heat from the shorted battery would boil off the acid.

The counter to this would be to bring up a spare set of batteries in a lorry and run some very large cables into the building.

More later

Best Regards

Bernard

----- Original Message -----

From: "Ken Follett" <kenprivate@ken-follett.com>
To: "Dan Starer (E-mail)"
<Dstarer@bellatlantic.net>
Cc: "Bernard Green (E-mail)"
<Syemon.Es@btinternet.com>
Sent: Monday, November 20, 2000 12:27 PM
Subject: Phone sabotage

| Here's a summary of where I'm at on the subject
of telephone sabotage. I
| am sending it to Bernard Green. Would you
forward it to Stan Swihart?
| I'm disappointed not to have heard from him but
maybe he's mulling
| things over. You might also send this to Brian
Dyes and Sam Hallas,
| whose ideas I have used.

| In 1940 France had fewer than 4 phones per 100
people. The German
| occupation must have created a large extra
demand for phone facilities.
| Furthermore, the French network was radial,
based on Paris, whereas most
| of the additional traffic would have been linear
cross-border, from
| Berlin to various French locations where there
were large German army
| bases.
| Nobody so far has been certain exactly what
arrangements the
| Germans made, and in particular whether there
was a separate telephone
| network for the German military. However, the
likeliest scenario is that
| they must have built additional facilities to
supplement the existing
| French system; that the additional facilities
must have been linear
| cross-border rather than Paris-radial; that the
new facilities must have
| been automatic, not manual; and that they must
have been at least partly
| restricted to military use.
| On that basis, here is the fictional scenario as
I see it:
| 1. There is a large building on the outskirts of
Reims that
| houses the local telephone exchange serving the
city and surrounding
| area.
| 2. The exchange has been partly modernised. Some
callers in
| the Reims area can dial nationally, but others

still have to speak to an
| operator for all calls other than local.
| 3. The Germans have taken over this building and
used it to
| house additional equipment as follows:
| a. The automatic exchange for all voice and
| teleprinter traffic between Berlin and German
forces all over northern
| France.
| b. Amplification equipment for the same.
| c. A key node in the Reichsbahn's Europe-wide
PBX
| which controls all French trains.
| 4. The Resistance destroy the exchange cable
chamber
| through which run all the cables for all these
systems. They also burn
| the records cards which show how the cables are
connected. They also
| burn the MDF (could someone please decrypt this
acronym for me?).
| Because the chamber is in the basement of the
building, the repair team
| will first have to use digging equipment to
access the cables. Then they
| will take several weeks to correctly reconnect
all the cables without
| the help of the records.
| 5. During this period, all calls which would
normally have
| passed through the new German military network
will have to be rerouted
| via the old French system. Most calls will
therefore have to pass
| through old-fashioned manual exchanges. There
will be great congestion
| on the system and this will impede German
communications and, crucially,
| force the military to use wireless communication
in preference to the
| phone system.
| Does this work?
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