
MORE PAFFERY

Wilf Pafford offers some more previously unrecorded episodes of early television history.

DOMINO versus Y-GERÄT Alexandra Palace, February 1941

Our sequence of operations on the first night of the Luftwaffe's blitz on London was as follows. First we would check on our receiver at Alexandra Palace the carrier frequency being used by the enemy in Normandy on their latest Y-Gerät radar system. This

we did during the Luftwaffe's warm-up testing period prior to their take-off to bomb London and/or Home Counties. Little was ever known about precise intentions, but at least we made doubly sure that our transmitter would be tuned to precisely the correct frequency, to ensure that our radar countermeasures were totally effective.

Later on, of course, they tried changing their radar frequencies (wavelengths) to catch us out, but we were ready for all their tricks. It took us nearly ten minutes to retune all our stages of RF circuits in the transmitter, which was not easy to do under pressure of impending attack. The Luftwaffe only needed thirty minutes from take-off before bombing over London.

Our other safeguard was provided by our operators at Swains Lane receiver station at Highgate, a few miles away but connected by Post Office land-line to AP transmitter. By using a low-voltage motor, this line controlled any drifting in our lock-on carrier beam, thus eliminating any give-away heterodyning beat-notes. On red alert, full power was applied at the Transmitter HT Control Desk, where I had every facility for meter-checking and listening on headphones to the young Luftwaffe pilots trying unsuccessfully to contact their HQ in northern France amidst confused instructions.

On the first night, our full-power intervention from the AP transmitter to the pilot's receiver caused enemy radio communication to get out of hand, leading to panic calls first blaming their own Y-Gerät for failure, then HQ for false readings and finally each other for meter errors by which time our own AA firing power was at maximum., Even AP's own glass roof joined in the crashing chaos going on above. But the bombs we were expecting never arrived.

There were three of us on duty in the Transmitter Control room at AP with others on standby... but we were all exhausted with nervous tension. We were never sure what was coming next. It was a night of dramatic failure for Y-Gerät and those highly trained young pilots too scared to take bombing initiative or get shot on returning to base.

Chaos ruled supreme, and the following night I again decided to go for full power (despite restraining advice which came too late) as there was no time for phoning or indecision. And again the results were successful. Rightly or wrongly, it worked, which was all that mattered.

By chance we were right. It was full power that blasted the enemy Y-Gerät system to 'kingdom come', which shattered German pilot

confidence for good. The next night I reduced power slightly until our meters were stable and happy, whilst our headphones still registered complete chaos overhead. After the 'All Clear' went, that was the first night we slept well.

I had always been scared of seeing another Coventry disaster over London caused by mistakes in checking enemy radar frequencies, which rendered our own countermeasures useless, leaving the Luftwaffe in full control of radio communication for bombing selected targets. We were fortunate at AP, where we used double checking on all enemy frequencies.

I would now like to try to conjure up the state of the art, including the psychological state of my mind when I was sent back from Dorset to Alexandra Palace following the dreadful cock-up at Coventry. "This must never happen again," was the message that kept going round in my mind, knowing full well from our local knowledge when the Heinkel came down on the beach at Bridport, that the next nightly blitz by the Luftwaffe was to be **London**.

Naturally I imagined that I had been selected as a junior technician to join the team of experts who had already started modifying the television transmitters to destroy the latest enemy radar system, Y-Gerät, which had not yet been used. To my horror, when I arrived back at Ally Pally and rang the front door bell, I was greeted by the caretaker, who informed me that all the senior television expert engineers had finished the modifications and had left London. I then met our cleaner, named Myers, who always used to make our tea on night shift, and he told me that Mr Tony Bridgewater was still there. Naturally I was delighted and after receiving a full report on the present situation, I learned that he was leaving the BBC to join the RAF at Radlett.

When I recovered, I decided to go straight to Broadcasting House to see Mr Hotine, Superintendent Engineer Transmitters (S.E.T.). When I told him there were no operational engineers left at AP, he immediately phoned Daventry for volunteers. But there were none and I could hardly blame them as Ally Pally was on Haw-Haw's list and MoD were sending RAF operational staff anyway.

I had been warned about phoning regarding operations, due to [the risk of] tapping, and there is no doubt that Haw-Haw, who knew Ally Pally backwards, had got wind of this admin cock-up. Because shortly afterwards, when I returned to Ally Pally, I discovered that Bill Jackson, my pre-war assistant, was still living at AP, awaiting a transfer to another job. Fortunately he had been trained on 'frequency changes' on our transmitters, so I was able to pick up all the necessary information. However, I did query with him why TRE

had been appointed by MoD to use our obsolete receiving station at Highgate as a control centre using a Post Office landline; that was in itself a risky option. Jacko (as I always called him) seemed a bit embarrassed but also seemed to be agreeing with my queries, when suddenly there was a hell of a whistle and a terrific explosion outside, rattling the glass roof and windows. We both ran like hell for the front door and flew into the one and only steel bell shelter. We were both white and shaken.

Later we discovered that there had been a stick of six high-explosive bombs aimed parallel to the front facade in line with both our sound and vision transmitters, about 100 yards short to the south. After leaving, Jacko sent me his report, with which I fully agreed.

So my querying MoD's decision to do radio monitoring of enemy radar frequency-checking from our decrepit radio receiving station at Swains Lane, Highgate, proved to be valid. In fact an investigation proved that the frequency calibration of the pre-war receiver in use was not up to standards required for checking enemy radar systems. Owing to the complicated line of command between TRE, the RAF 80 Wing Radlett and the BBC, this near catastrophe has remained under the carpet with others. One good thing came out. Six RAF technicians and a few BBC engineers arrived post-haste to man 'Domino' at Ally Pally.

The obvious conclusions from this experience is that TRE's failure to check enemy radar frequencies accurately at Coventry, was repeated at Swains Lane, Highgate, where TRE chose to carry out their monitoring of enemy radar frequency-checking. Unlike Coventry, by sheer luck Alexandra Palace was not flattened out of existence. The final conclusion is that TRE personnel should not have taken on operational duties but should have left these to professional engineers trained in that work. And eventually that was what happened at Alexandra Palace, where we double-checked each and every vital operation which finally obliterated the enemy Y-Gerät radar system.

AA	anti-aircraft
AP	Alexandra Palace
HT	high-tension
TRE	Telecommunications Research Establishment, Dorset