

Top Secret "U"Ticom/M-5

DEMONSTRATION OF KESSELRING "FISH TRAIN"

The brief note attached was written by
Lt. LEVENSON, AUS, after visiting the station
as set up at Beaconsfield on 18th June, 1945.

Ticom
8 July 1945

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JELLYFISH DEMONSTRATION

The Kesselring Fish train which included the station with operating key Jellyfish was transported from the Salzburg area where it was found, and set up to operate at Beaconsfield about 25 miles outside of London. The Station was complete except for a power unit which had been carried in a trailer. The Ministry of Works supplied one, and the station was ready to operate after a few days of preparation. The equipment was all in working order and required no repair.

Each end consisted of two trucks, Senderwagen or transmitter and Betreibswagen where the actual operations took place. In this were housed, one teleprinter, tape reader, two Tunny machines, two Fernschreibanschlussgeräte and W.T.K. or voice frequency modulator. There was also a central unit which listened in on the transmitting tone. This unit was connected to the Betreibswagen by field telephone.

7894
The operation was as follows: The message was punched on a tape and inserted in the tape reader which was connected to the Tunny machine. The teleprinter itself was also connected to the Tunny machine. An operator sat at the teleprinter and could shift from automatic (tape reader) to hand transmission. This was particularly essential during duplex operation to be described later. The Tunny machine was connected to the F.A. geräte which in turn was connected to the W.T.K. unit that modulated the tone for transmission. Circuit diagrams will be supplied by Mr. Kenworthy of Knockholt.

Wheel patterns and settings were given to the operators. The settings were defined by QEP numbers. After setting the patterns on the wheels, there followed considerable chat in Q code all sent in clear. There were heavy penalties for enciphering any of this. After deciding the QEP for the message a series of RY RY.....were sent to insure clarity of tone and the broadcast began. Reception is the reverse of transmission. The tone went from the receiver through the WTK. unit, the F.A. geräte, the Tunny machine, then to a teleprinter which printed the message in clear on a sticky tape. The tape was cut off in sections and pasted on sheets of paper. It should be noticed that the cipher exists only in the Air; it does not appear either as a punched tape or in printed form.

There was also a demonstration of doppel Verkehr, or duplex sending in which both ends sent and received simultaneously. This was usually done only under the most favorable broadcasting conditions. If either receiver failed to work, the sender in the same van would notify the other sender through a hand transmission to his receiver that something was wrong.

Information gleaned from the operators will be supplied in a report by Capt. Ericsson.