

3 generations of Audio Frequency line based NF-B bugs. The 33406-111 bug (Bremen 20-1) in the foreground could be fitted in a 10 mm tube.



Line amplifier 33406-13, was used for monitoring two different microphones, or two microphones installed in one Operation Object for stereo listening.

NF-B (1) Audio Frequency based bugs (GDR line bugs II)

Country of origin: GDR

To be read in conjunction with Chapter 163.

DATA SUMMARY

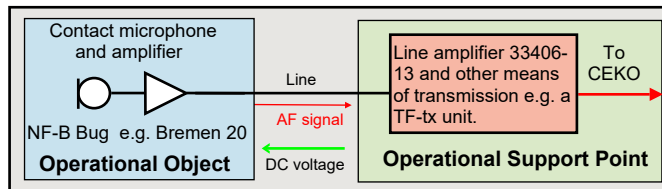
Organisation: MfS, Abt 26.
Design /manufacturer: MfS, OTS Abt 33.
Year of Introduction: Probably 1950s till 1989.
Purpose: Covert (line based) room interception.
Power Supply: Usually powered from a control point or Operational Support Point.

References:

- With many thanks to Detlev Vreisleben, DC7KG, Germany for his excellent photographs and scans, and providing technical and historical information.

REMARKS

A NF-B (*NF = German: Niederfrequenz = audio frequency*) Measure B concealed bug was part of a straightforward system, often used in buildings which were usually already been permanently wired for this purpose. E.g. prisons and hotels. It was comprised of a contact microphone and amplifier, connected to a 2 wire line, usually (but not always) powered via this line by the Operational Support Point. The audio was usually routed from the Operational Support Point to a District CEKO where it was recorded. In some cases listening-in and recording was done locally. The system could be used on short range local lines up to 1 km.



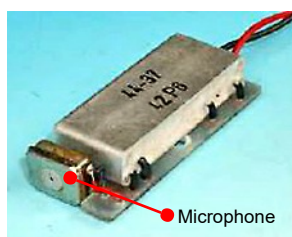
Block diagram of NF-B audio frequency based Measure B system.

Early NF-B bug with built-in microphone, type unknown, possible built by MfS Abt.26.

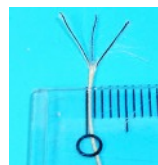
Speech opening tube.



Early Bremen 19 bug used with a separate microphone.



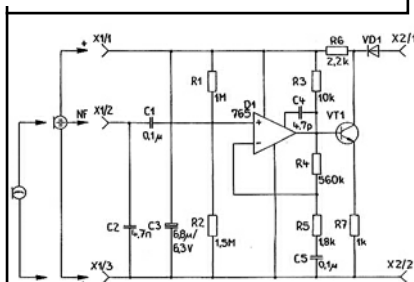
Two later versions of Bremen 19. (cover name 31550-401)



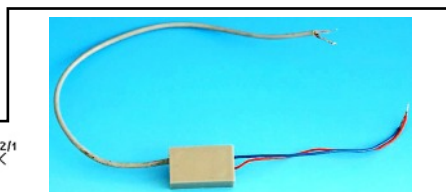
MfS Abt. 26 used 0.5mm thick 3-wire cable for the installation of NF-B bugs. This cable was originally developed for remote control of anti-tank projectiles.



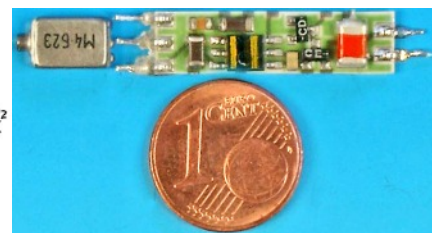
Unknown NF-B bug, with a separate Sennheiser microphone, used in the Rumelsburg prison. The microphone was hidden in a wooden dowel above the cell door.



Circuit diagram of Bremen 20. The microphone could be electret or magneto dynamic. It was normally powered by e.g. a line amplifier unit in the Operational Support Point. Variations in design were the enclosure and gain which could be 20, 30 or 40dB.



Bremen 20-2 (cover name 33406-112) with separate microphone and amplifier.



Bremen 20-1 (cover name 33406-111), had a built-in microphone. (See also top left picture on this page)