New Polytone Designation - XPB Series

Change of XPA to XPA1

April 2019

Polytone change and added, new Polytone

Some years ago the XPA trials were heard by RNGB who, in concert with PLdn and CVB made the analysis of that polytone series. Expected schedules, usually on a 20 minute repetition, were marked 'a' to 'f' which sufficed to allow identification amongst the different sendings.

Another XPA was then heard, the intro pulse train inverted, no ident or message number and the tones separated by 15Hz rather than the 40Hz previously seen on the original XPA.

This 15Hz spaced XPA was designated XPA2 and a number of schedules have appeared usually spaced by 20mins, but sometimes spaced with 10mins. These 10m schedules when heard, sometimes across an hour, are short-lived and believed to be a diplomatic 'newsround.'

With the arrival of the XPB series there is the possibility, as has been raised by Priyom members, of further evolution. That even, in the same series means the next would be XPB2. To keep some order the 'new' Russian Intel Multitone System will be conveniently designated XPB1.

In keeping with this change/addition the old XPA will now be designated XPA1.

Please add to your Active Station Lists. [Thanks to Priyom for their input]

XPB Series

XPB1 [Russian Intel Multitone System MFSK-16]



Full transmission, 8147kHz 1950z 16/04/2019



2.5s sample from above transmission, illustrating complexity of tones

Tones spaced by 175 Hz, ranging from 540 Hz to 3165 Hz.

Four possible symbol rates: 16 Bd, 33 Bd, 66 Bd or 132 Bd (approximate).

No outstanding intro or outro sequence, but the first minute of transmissions is always the same random-looking, Linear-Feedback Shift Register [LFSR] generated tone sequence.

Unlike other stations in the family, transmissions are not 3 repeats spaced by 20 minutes, but can be for example 6 repeats spaced by 10 minutes. First noted circa 2014, first stable schedule noted in 2018.

The part schedule can be found: http://priyom.org/number-stations/digital/xpb/schedule

Thanks to Priyom for the notification and analysis of the transmission in this new series.

This definition should be added to the ENIGMA 2000 Active Stations List V1.03 of September 2017

ENIGMA 2000 April 2019