The Semi-automatic key with two dash levers, The Cootie Bug WITH "COOTIE DASHER"

If semi-automatic Cootie Bug and even automatic keys, are studied in all their myriad constructed options, from 1904 to the present day, then the Cootie Bug with "cootie dasher", that is with two dash levers, which when alternately pressing the index finger to the left, then to the right, producing a nearly uniform sequence of dashes, is practically unknown to the world.

Such a Cootie Bug actually exists and it was made in the beginning of the World War II (or as it is called in Russia, the "Great Patriotic War" (i.e. World War 2) in the solely for use on communication lines of the special services which had the most skilled radiotelegraphists on the circuits.

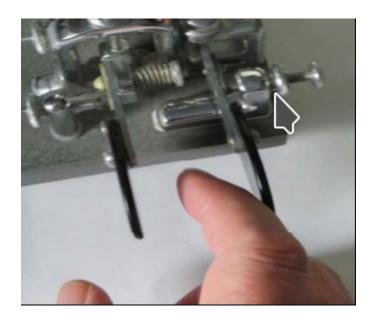
Advantages of semi-automatic with two levers are obvious - it is exhibits a noticeable improvement of the timing of the dash.

At medium operating speeds of 130-160 characters per minute transmission (26 to 32 wpm) on the Cootie Bug with two levers is indistinguishable by ear from a transmission using the electronic keyer, indicating a high quality of transmission in the absence of "Handwriting", or peculiarities in the sending, which could identify a certain operator. This "Handwriting" is called an operator's "fist" in English.

## Working position of the hand

The overall working position of the hand and fingers when working on Cootie Bug-e with two levers is a little different from the position for working with a Cootie Bug with one lever.

The hands and the movements of the wrist are the same, but the series of dashes - two or more - are transmitted by alternately tapping the index finger of the left and right handles (do this as a warm-up exercise before you start working on the air for two to three minutes - See photo #16). (pictures are attached.)



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Demonstration of the described movement can be viewed and listened to by going to YouTube UA3AO 384.MOV – 386.MOV. <a href="https://www.youtube.com/watch?v=GB\_l1xKj90Q">https://www.youtube.com/watch?v=GB\_l1xKj90Q</a>

To explain the movements of the hand in the transmission of signs, we denote the thumb with the letter "T", and the index finger - "F". Movement to the right - "R" move to the left - "L". The right handle is only used to transmit with two or more dashes. Let's start with the sending of figures or digits:

- 1 DIT-DAH-DAH-DAH or T-FL-FR-FL-FR
- 2 DIT-DIT-DAH-DAH-DAH or T(held for two dots)-FL-FR-FL
- 3 DIT-DIT-DAH-DAH or T (held for three dots)-FL-FR
- 4 DIT-DIT-DIT-DAH or T (held for four dots)-FL
- 5 DIT-DIT-DIT-DIT or T (held for five dots)
- 6 DASH-DIT-DIT-DIT or FL-T (held for four dots)
- 7 DASH-DASH-DIT-DIT or FL-FR-T (held for three dots)
- 8 DASH-DASH-DIT-DIT or FL-FR-FL-FR-T (held for two dots)
- 9 DASH-DASH-DASH-DIT or FL-FR-FL-FR-T (one dot)
- 0 DASH-DASH-DASH-DAH or FL-FR-FL-FR-FL

The desire to master the work on the Cootie Bug with the added "cootie dasher". You have to add a second dash lever to the existing key.

Several variants of such a revision are shown in photo 17, 18, 19.

The design can be any of these, but whatever design is used, it must ensure the closure of the keying line by moving the added paddle to the right.





**PHOTO 18** 



**PHOTO 19** 

The distance between the levers is the the space the index finger needs to move back and forth or about 34-35 mm or about 1.3 to 1.4 inches.

Throughout the entire period of mastering the work on Cootie Bug-e with two dash levers, keep the speed of 24 to 25 wpm (120-130 characters per minute). When you can send error free for two to three minutes, you can increase the speed to 30 wpm (150 cpm). QRQ of even faster speeds can be produced depending on the user's ability, but high-quality transmissions with a speed of 120-130 characters per minute will be guaranteed.

Compared with working with an electronic keyer, the "Cootie Bug" is more "obedient" to obeying the operator and when working at the same speeds, the probability of a Cootie Bug making errors is lower, than on an electronic key, or at least it seems so to the operators who have used this type key.

Here are some modified Cootie Bug models, that have been equipped with a second lever, or "cootie dasher.":



PHOTO 20



PHOTO 21



PHOTO 22



PHOTO 23



## PHOTO 24

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