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Study of over compressed modes in detonation of condensed HE ALEXEY FEDOROV, ANATOLY MIKHAILOV, DMITRY NAZAROV, STANISLAV FINYUSHIN, TATIANA GOVORUNOVA, DENIS KALASHNIKOV, EVGENY MIKHAILOV, RFNC-VNIIEF — We studied over compressed modes in detonation of condensed HE based on PETN, TNT and RDX using laser interferometer Fabry-Perot. We registered different profiles of detonation wave under different degrees of over compression: profiles in which the value of particle velocity either fell down after the shock-wave jump, or had a constant value, or smoothly grew up. Under maximum of over compression 2.4 times we registered increase in duration of chemical reaction (90 nsec) in compare with value of chemical spike (4 nsec) for stationary detonation wave.

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