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Modeling Short Shock Pulse Duration Initiation of LX-16 and LX-10 Charges CHADD MAY, CRAIG TARVER, LLNL — Short pulse duration shock initiation experiments were performed on LX-16 (96% PETN, 4% FPC 461 binder by weight) and LX-10 (95% HMX, 5% Viton binder by weight) using electrically driven kapton and Parylene-C flyer plates. Critical impact velocities for initiation at several flyer plate thicknesses and diameters were determined. The Ignition and Growth reactive flow model parameters previously developed for LX-16 and LX-10 were used to calculate these experiments. Good agreement was obtained between the experimental and calculated critical impact velocities that caused shock initiation of the explosive targets. This work was performed under the auspices of the U. S. Department of Energy by the Lawrence Livermore National Laboratory under Contract No. DE-AC52-07NA27344.

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